

UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN

IN RE:

DURAMAX DIESEL LITIGATION

No. 2:17-cv-11661-CGS-APP  
Hon. George Caram Steeh

**JURY TRIAL DEMANDED**

**FIRST AMENDED AND CONSOLIDATED  
CLASS ACTION COMPLAINT**

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Plaintiffs, individually and on behalf of all others similarly situated (the “Class”), allege the following based upon the investigation of counsel, the review of scientific papers, and the proprietary investigation of experts:

## **I. INTRODUCTION**

1. This is what General Motors (“GM”) promised when selling its popular Silverado and Sierra HD Vehicles—that its Duramax engines turned “heavy diesel fuel into a fine mist,” delivering “low emissions” that were a “whopping reduction” compared to the prior model and at the same time produced a vehicle with “great power.” GM claimed its engineers had accomplished a “remarkable reduction of diesel emissions.”

2. As explained in detail below, this is not what GM delivered in the estimated 705,000 or more 2011-2016 Silverado and Sierra 2500 and 3500 diesels on the road. In contrast to GM’s promises, scientifically valid emissions testing has revealed that the Silverado and Sierra 2500 and 3500 models emit levels of NO<sub>x</sub> many times higher than (i) their gasoline counterparts, (ii) what a reasonable consumer would expect, (iii) what GM had advertised, (iv) the Environmental Protection Agency’s maximum standards, and (v) the levels set for the vehicles to obtain a certificate of compliance that allows them to be sold in the United States. Further, the vehicles’ promised power, fuel economy, and efficiency is obtained

only by turning off or turning down emissions controls when the software in these vehicles senses they are not in an emissions testing environment.

3. In the last two years, there have been major scandals involving diesel vehicles made by Volkswagen, Audi, Porsche, Mercedes, and FCA. Volkswagen pled guilty to criminal violations of the Clean Air Act, Mercedes is under investigation by the Department of Justice, and FCA has been sued by the EPA for violating the Clean Air Act for improper emissions in thousands of 2014-2016 Dodge Ram 1500 EcoDiesels and 2014-2016 Jeep Grand Cherokee EcoDiesels. The diesel vehicles made by these manufacturers evade emissions standards with the help of certain software that turns off or down emissions controls when the vehicles sense they are not in a test environment.

4. Testing conducted by engineering experts in emissions testing indicates that GM is no different. Its top selling Silverado and Sierra 2500HD and 3500HD vehicles emit far more pollution on the road than in the emission certification testing environment. These vehicles exceed federal and state emission standards and employ at least three different “defeat devices” to turn down the emissions controls when the vehicle senses that it is not in the certification test cycle. A defeat device means an auxiliary emissions control device that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use.

5. GM Defeat Device No. 1 reduces or derates the emissions system when temperatures are above the emissions certification test range (86°F). GM Defeat Device No. 2 operates to reduce emissions control when temperatures are below the emissions certification low temperature range (68°F). Testing reveals that at temperatures below 68°F (the lower limit of the certification test temperature), stop and go emissions are 2.1 times the emissions standard at 428 mg/mile (the standard is 200 mg/mile). At temperatures above 86°F, stop and go emissions are an average of 2.4 times the standard with some emissions as high as 5.8 times the standard. Based on temperatures in the top 30 metropolitan areas, these vehicles are operating with the emissions systems derated a material amount of their vehicle miles travelled. But the emission scheme is a step more nefarious: enter GM Defeat Device No. 3, which reduces the level of emissions controls after 200-500 seconds of steady speed operation in all temperature windows, causing emissions to increase on average of a factor of 4.5. Based on a study of temperatures in 30 major metropolitan areas as well as the demographics of Silverado and Sierra sales, Plaintiffs' experts estimate that due to just the temperature-triggered defeat devices, the vehicles operate at 65-70% of their miles driven with emissions that are 2.1 to 5.8 times the standard.

6. Increased sales and thus increased profits drove GM to use at least these three defeat devices in its Duramax diesel engines. By reversing the

traditional order of the exhaust treatment components and putting the Selective Catalytic Reduction (SCR) in front of the Diesel Particulate Filter (DPF), GM could obtain and market higher power and fuel efficiency from its engines while still passing the cold-start emissions certification tests. This made GM's trucks more appealing and competitive in the marketplace, driving up sales and profits. But the reordering would have also drastically increased the need to employ Active Regeneration (burning off collected soot at a high temperature) and other power- and efficiency-sapping exhaust treatment measures, reversing the very advantage gained. GM's solution, with the participation of defendants Robert Bosch GmbH and Robert Bosch LLC, was to install defeat devices to purposefully reduce SCR dosing, increase NOx emissions, and thus decrease Active Regeneration. The defeat devices allowed GM to have its cake and it eat too. It could gain the advantage of hot exhaust going into the SCR system needed to pass cold-start tests, while avoiding the fuel- and power-robbing Active Regeneration procedure that the DPF filter requires when the SCR treatment comes first. GM turned a blind eye to the twofold to fivefold increase in deadly NOx emissions its scheme caused—all to drive up its sales and profits.

7. Diesel engines pose a difficult challenge to the environment because they have an inherent trade-off between power, fuel efficiency, and emissions. Compared to gasoline engines, diesel engines generally produce greater torque,

low-end power, better drivability, and much higher fuel efficiency. But these benefits come at the cost of much dirtier and more harmful emissions.

8. One by-product of diesel combustion is NO<sub>x</sub>, which generally describes several compounds comprised of nitrogen and oxygen atoms. These compounds are formed in the cylinder of the engine during the high temperature combustion process. NO<sub>x</sub> pollution contributes to nitrogen dioxide, particulate matter in the air, and reacts with sunlight in the atmosphere to form ozone. Exposure to these pollutants has been linked with serious health dangers, including serious respiratory illnesses and premature death due to respiratory-related or cardiovascular-related effects. The United States Government, through the Environmental Protection Agency (EPA), has passed and enforced laws designed to protect United States citizens from these pollutants and certain chemicals and agents known to cause disease in humans. Automobile manufacturers must abide by these U.S. laws and must adhere to EPA rules and regulations. This case is not based on these laws but on deception aimed at consumers.

9. Seeing a major opportunity for growth, almost all of the major automobile manufacturers rushed to develop “clean diesel” and promoted new diesel vehicles as environmentally friendly and clean. Volkswagen, Mercedes, GM, FCA, and other manufacturers began selling diesel cars and trucks as more powerful, yet also as an environmentally friendly alternative to gasoline vehicles.

And the marketing worked, as over a million diesel vehicles were purchased between 2007 and 2016 in the United States and over ten million in Europe.

10. The green bubble with respect to diesel vehicles popped on September 18, 2015, when the EPA issued a Notice of Violation of the Clean Air Act (the “First NOV”) to Volkswagen Group of America, Audi AG, and Volkswagen America for installing illegal “defeat devices” in 2009-2015 Volkswagen and Audi diesel cars equipped with 2.0-liter diesel engines. A defeat device, as defined by the EPA, is any apparatus that unduly reduces the effectiveness of emissions control systems under conditions a vehicle may reasonably be expected to experience. The EPA found that the Volkswagen/Audi defeat device allowed the vehicles to pass emissions testing while in the real world these vehicles polluted far in excess of emissions standards. The California Air Resources Board also announced that it had initiated an enforcement investigation of Volkswagen pertaining to the vehicles at issue in the First NOV.

11. On September 22, 2015, Volkswagen announced that 11 million diesel cars worldwide were installed with the same defeat device software that had evaded emissions testing by U.S. regulators. Volkswagen pled guilty to criminal charges and settled civil class actions for over ten billion dollars.<sup>1</sup>

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<sup>1</sup> See Exhibit 1, Nathan Bomey, *Volkswagen Emission Scandal Widens: 11 Million Cars Polluting*, USA Today (Sept. 22, 2015), <http://www.usatoday.com/story/money/cars/2015/09/22/volkswagen-emissions-scandal/72605874/>.

12. Volkswagen wasn't alone—soon, government agencies began to reveal that many manufacturers both in the U.S. and in Europe had produced dozens of models that were exceeding emissions standards. On December 2, 2016, Plaintiffs' counsel, based on the same type of testing and investigation in this case, filed a class action alleging that FCA's Dodge Ram and Jeep Grand Cherokee were exceeding emissions standards that a reasonable consumer would expect to be produced by "Eco" vehicles. On January 12, 2017, confirming the work of Plaintiffs' counsel, the EPA issued a Notice of Violation to FCA because it had cheated on its emissions certificates with respect to its Dodge Ram and Jeep Grand Cherokee vehicles, and on May 23, 2017, the United States filed a civil suit in the Eastern District of Michigan alleging violations of the Clean Air Act (E.D. Mich. No. 17-cv-11633).

13. GM is no different. To appeal to environmentally conscious consumers, and to compete with its rival and top selling Ford trucks, and to comply with new emissions regulations effective in 2011, GM markets its Silverado 2500 and 3500 and Sierra 2500 and 3500 Duramax vehicles as having low emissions, high fuel economy, and powerful torque and towing capacity. GM charges a premium of approximately \$9,000 for diesel-equipped vehicles over comparable gas Silverados or Sierras.

14. GM's representations are deceptive and false, and GM sold these vehicles while omitting information that would be material to a reasonable consumer, namely that GM has programmed its Silverado 2500 and 3500 and Sierra 2500 and 3500 Duramax vehicles to significantly reduce the effectiveness of the NOx reduction systems during real-world driving conditions.

15. Plaintiffs' on-road testing has confirmed that GM's Silverado 2500 and 3500 and Sierra 2500 and 3500 vehicles with a Duramax engine produce NOx emissions that are not "reduced" or "low" but in fact exceed emission standards, and that GM has programmed the vehicles so that in a wide range of conditions, the emissions systems are powered down, producing NOx in excess of emissions standards. This testing indicates that GM and Bosch have programmed the software to detect a possible emission testing environment and to comply with emissions requirements in that circumstance, but to turn off the emissions controls when a testing environment is not detected. A reasonable consumer would not expect their Silverado or Sierra vehicle to spew unmitigated NOx in this fashion while driving in the city or on the highway, nor would a reasonable consumer expect that fuel economy was achieved in part by turning off or derating the emission systems, nor would a reasonable consumer expect that if the emissions were as promised the advertised fuel economy and performance could not be achieved.

16. Plaintiffs allege that the following GM models powered by Duramax engines are affected by the unlawful, unfair, deceptive, and otherwise defective emission controls utilized by GM: model year 2011-2016 GM Sierra 2500HD and 3500HD trucks and GM Silverado 2500HD and 3500HD trucks (the “Polluting Vehicles”).

17. In addition, GM markets the Polluting Vehicles as fuel efficient. Without manipulating its software to turn off the emissions controls, GM could not achieve the fuel economy and range it promises.

18. GM did not previously disclose to Plaintiffs or Class members that in real-world driving conditions, the Polluting Vehicles can only achieve high fuel economy, power, and durability by reducing emissions controls in order to spew NOx into the air.

19. GM never disclosed to consumers that the Polluting Vehicles may be “clean” diesels in very limited circumstances but are “dirty” diesels under most driving conditions. GM never disclosed to consumers that it programs its emissions systems to work only under certain conditions. GM never disclosed that it prioritizes engine power and profits over the environment. GM never disclosed that the Polluting Vehicles’ emissions materially exceed the emissions from gasoline-powered vehicles, that the emissions exceed what a reasonable consumer would

expect from a “low emissions” vehicle, and that the emissions materially exceed applicable emissions limits in real-world driving conditions.

20. GM did not act alone. At the heart of the diesel scandal in the United States and Europe are Robert Bosch GmbH (“Bosch GmbH”) and Robert Bosch LLC (“Bosch LLC”) (sometimes referred together as “Bosch”). Bosch GmbH and Bosch LLC were active and knowing participants in the scheme to evade U.S. emissions requirements. Bosch GmbH and Bosch LLC developed, manufactured, and tested the electronic diesel control (EDC) that allowed GM to implement the defeat device. The Bosch EDC17 is a good enabler for manufacturers to employ “defeat devices” as it enables the software to detect conditions when emissions controls can be derated—*i.e.*, conditions outside of the emissions test cycle. Almost all of the vehicles found or alleged to have been manipulating emissions in the United States (Mercedes, FCA, Volkswagen, Audi, Porsche, Chevy Cruze) use a Bosch EDC17 device.

21. Plaintiffs bring this action individually and on behalf of all other current and former owners or lessees of the Polluting Vehicles. The Polluting Vehicles include all 2011-2016 GM Sierra 2500HD/3500HD and Silverado 2500HD/3500HD vehicles. Plaintiffs seek damages, injunctive relief, and equitable relief for GM’s and Bosch’s misconduct related to the design, manufacture, marketing, sale, and lease of the Polluting Vehicles, as alleged in this Complaint.

## **II. JURISDICTION**

22. This Court has subject matter jurisdiction over this action under 28 U.S.C. § 1331 because Plaintiffs' claims arise under the RICO Act, 18 U.S.C. § 1962. The Court also has diversity jurisdiction because Plaintiffs and Defendants reside in different states. The Court has supplemental jurisdiction over Plaintiffs' state law claims under 28 U.S.C. § 1367.

23. This Court also has original jurisdiction over this lawsuit pursuant to 28 U.S.C. § 1332(a)(1), as modified by the Class Action Fairness Act of 2005, because Plaintiffs and Defendants are citizens of different states; there are more than 100 members of the Class (as defined herein); the aggregate amount in controversy exceeds \$5 million, exclusive of attorneys' fees, interest, and costs; and Class members reside across the United States. The citizenship of each party is described further below in the "Parties" section.

24. This Court has personal jurisdiction over each Defendant pursuant to 18 U.S.C. § 1965(b) & (d). This Court has personal jurisdiction over Defendants because they have minimum contacts with the United States, this judicial district, and this State, and they intentionally availed themselves of the laws of the United States and this state by conducting a substantial amount of business throughout the state, including the design, manufacture, distribution, testing, sale, lease, and/or warranty of GM vehicles in this State and District. At least in part because of

Defendants' misconduct as alleged in this lawsuit, the Polluting Vehicles ended up on this state's roads and in dozens of franchise dealerships.

### **III. VENUE**

25. Venue is proper in this Court under 28 U.S.C. § 1391 because:

(i) Defendants conduct substantial business in this District and have intentionally availed themselves of the laws and markets of the United States and this District; and/or (ii) many of the acts and transactions giving rise to this action occurred in this District, including, *inter alia*, GM's promotion, marketing, distribution, and sale of the Polluting Vehicles to Plaintiffs in this District. Defendant GM sells a substantial number of automobiles in this District, has dealerships located throughout this District, and the misconduct occurred in part in this District. Venue is also proper under 18 U.S.C. § 1965(a) because Defendants are subject to personal jurisdiction in this District, as alleged in the preceding paragraph, and Defendants have agents located in this District.

### **IV. PARTIES**

#### **A. Arizona Plaintiff**

##### **1. George Stanley**

26. Plaintiff George Stanley (for the purpose of this paragraph, "Plaintiff") is an individual residing in Albany, New York. In or around February 2012, Plaintiff purchased a new 2012 GM Sierra 3500HD from Earnhardt GMC, an authorized GM dealer in Mesa, Arizona. Plaintiff purchased and still owns this

vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM's unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a "clean diesel" and/or a "low emission diesel," complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less

for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**B. Arkansas Plaintiff**

**1. Michael Reichert**

27. Plaintiff Michael Reichert (for the purpose of this paragraph, "Plaintiff") is an individual residing in Little Rock, Arkansas. On January 4, 2014, Plaintiff purchased a new 2013 GMC Sierra 2500 from Everett Buick/GMC, an authorized GM dealer in Bryant, Arkansas. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed

level of pollutants such as NOx. GM's unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a "clean diesel" and/or a "low emission diesel," complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not

limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**C. California Plaintiffs**

**1. Andrei Fenner**

28. Plaintiff Andrei Fenner (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Mountain View, California. On August 1, 2013, Plaintiff purchased a used 2011 GMC Sierra from Cardinale GMC, an authorized GM dealer in Monterey, California. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of

overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM’s website and representations from GM’s authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM’s omissions and/or misrepresentations and Defendants’ operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel

costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

## **2. Gregory Williams**

29. Plaintiff Gregory Williams (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Lodi, California. In or around September 2016, Plaintiff purchased a new 2016 Chevrolet Silverado 2500HD from Chase Chevrolet, an authorized GM dealer in Stockton, California. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but

mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM’s website and representations from GM’s authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM’s omissions and/or misrepresentations and Defendants’ operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the

unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**D. Louisiana Plaintiffs**

**1. Joshua Herman**

30. Plaintiff Joshua Herman (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Sulphur, Louisiana. On June 4, 2016, Plaintiff purchased a new 2016 Silverado with a Duramax diesel engine from Billy Navarre Chevrolet, an authorized GM dealer in Sulphur, Louisiana. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and

would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**E. Michigan Plaintiff****1. Phillip Burns**

31. Plaintiff Phillip Burns (for the purpose of this paragraph, “Plaintiff”) is an individual residing in South Boardman, Michigan. On or around September 29, 2014, Plaintiff purchased a new 2015 Chevrolet Silverado 2500HD from Williams Chevrolet, an authorized GM dealer in Traverse City, Michigan. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because

of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**F. Nevada Plaintiff****1. Kurt Roberts**

32. Plaintiff Kurt Roberts (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Las Vegas, Nevada. In or around May 2015, Plaintiff purchased a used 2013 Chevrolet Silverado 3500HD from Dralle Chevrolet, an authorized GM dealer in Peotone, Illinois. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system,

as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**G. New Jersey Plaintiff**

**1. Anthony Gadecki**

33. Plaintiff Anthony Gadecki (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Bordentown, New Jersey. On May 14, 2013, Plaintiff purchased a used 2011 Silverado with a Duramax diesel engine from Star Buick & GMC, an authorized GM dealer in Easton, Pennsylvania. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in

part, because of the Diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

## **H. New Mexico Plaintiff**

### **1. Cody McAvoy**

34. Plaintiff Cody McAvoy (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Fence Lake, New Mexico. On April 9, 2015, Plaintiff purchased a new 2015 Silverado with a Duramax diesel engine from Mountain View Chevrolet, an authorized GM dealer in Claremont, California. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because

of the Diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

## **I. Oregon Plaintiff**

### **1. Keith Ash**

35. Plaintiff Keith Ash (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Sandy, Oregon. On March 25, 2017, Plaintiff purchased a used 2016 Chevrolet Silverado 2500HD from McLoughlin Chevrolet, an authorized GM dealer in Milwaukie, Oregon. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system,

as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**J. Texas Plaintiffs****1. Matt Henderson**

36. Plaintiff Matt Henderson (for the purpose of this paragraph, “Plaintiff”) is an individual residing in Coleman, Texas. In or around February 2016, Plaintiff purchased a used 2015 Chevrolet Silverado 3500HD from Bayer Motor Company, an authorized GM dealer in Comanche, Texas. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM’s unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a “clean diesel” and/or a “low emission diesel,” complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because

of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

**2. James T. Crunkleton III.**

37. Plaintiff James T. Crunkleton III (for the purpose of this paragraph, "Plaintiff") is an individual residing in Waynesburg, Kentucky. On August 11,

2012 Plaintiff purchased a new 2012 GMC Sierra 3500 with a Duramax diesel engine from Vernon Auto Group, an authorized GM dealer in Vernon, Texas. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM's unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of his vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased his vehicle on the reasonable but mistaken belief that his vehicle was a "clean diesel" and/or a "low emission diesel," complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased his vehicle, in part, because of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before he purchased the vehicle, he reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance

of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

### **3. Carrie Mizell**

38. Plaintiff Carrie Mizell (for the purpose of this paragraph, "Plaintiff") is an individual residing in Haslet, Texas. On December 9, 2011, Plaintiff purchased a new 2012 GMC Sierra from Freeman Buick-GMC, an authorized GM dealer in Grapevine, Texas. Plaintiff purchased and still owns this vehicle. Unknown to Plaintiff at the time the vehicle was purchased, it only achieved its promised fuel economy and performance because it was equipped with an

emissions system that, during normal driving conditions, exceeded the allowed level of pollutants such as NOx. GM's unfair, unlawful, and deceptive conduct in designing, manufacturing, marketing, selling, and leasing the vehicle without proper emission controls has caused Plaintiff out-of-pocket loss in the form of overpayment at the time of purchase, and diminished value of her vehicle. GM knew about, or recklessly disregarded, the inadequate emission controls during normal driving conditions, but did not disclose such facts or their effects to Plaintiff, so Plaintiff purchased her vehicle on the reasonable but mistaken belief that her vehicle was a "clean diesel" and/or a "low emission diesel," complied with U.S. emissions standards, was properly EPA-certified, and would retain all of its promised fuel economy and performance throughout its useful life. Plaintiff selected and ultimately purchased her vehicle, in part, because of the diesel system, as represented through advertisements and representations made by GM. Plaintiff recalls that before she purchased the vehicle, she reviewed advertisements on GM's website and representations from GM's authorized dealer touting the efficiency, fuel economy, and power and performance of the engine. Had GM disclosed this design or the fact that the vehicle actually emitted unlawfully high levels of pollutants, Plaintiff would not have purchased the vehicle or would have paid less for it. Plaintiff and each Class member has suffered an ascertainable loss as a result of GM's omissions and/or misrepresentations and Defendants' operation

of a RICO enterprise associated with the Duramax engine system, including but not limited to a high premium for the Duramax engine compared to what they would have paid for a gas-powered engine, out-of-pocket losses by overpaying for the vehicles at the time of purchase, and future attempted repairs, future additional fuel costs, decreased performance of the vehicles, and diminished value of the vehicles. Neither GM nor any of its agents, dealers, or other representatives informed Plaintiff or Class members of the existence of the unlawfully high emissions and/or defective nature of the diesel engine system of the Polluting Vehicles prior to purchase.

## **K. Defendants**

### **1. General Motors**

39. Defendant General Motors LLC (GM) is a Delaware limited liability company with its principal place of business located at 300 Renaissance Center, Detroit, Michigan, and is a citizen of the States of Delaware and Michigan. The sole member and owner of General Motors LLC is General Motors Holdings LLC. General Motors Holdings LLC is a Delaware limited liability company with its principal place of business in the State of Michigan.

40. GM, through its various entities, including Chevrolet and GMC, designs, manufactures, markets, distributes, and sells GM automobiles in this District and multiple other locations in the United States and worldwide. GM

and/or its agents designed, manufactured, and installed the GM engine systems in the Silverado and Sierra vehicles. GM also developed and disseminated the owner's manuals and warranty booklets, brochures, advertisements, and other promotional materials relating to the Polluting Vehicles.

## **2. The Bosch Defendants**

41. From at least 2005 to 2015, Robert Bosch GmbH, Robert Bosch LLC, and currently unnamed Bosch employees (together, "Bosch") were knowing and active participants in the creation, development, marketing, and sale of illegal defeat devices specifically designed to evade U.S. emissions requirements in vehicles sold solely in the United States and Europe. These vehicles include the GM vehicles in this case and the Dodge Ram 1500 EcoDiesel and Jeep Grand Cherokee EcoDiesel, as well as numerous models made by Volkswagen, Audi, Porsche, and Mercedes.

42. The following is a list, excluding the GM vehicles in this case, of all diesel models in the United States with Bosch-supplied software whose emissions exceed federal and California emission standards and whose emissions are beyond what a reasonable consumer would expect from cars marketed as "clean" or "low emission":

AFFECTED VEHICLES		
<b>VOLKSWAGEN:</b>		
	<b>2.0-liter Class Vehicles</b>	<b>3.0-liter Class Vehicles</b>
	VW Jetta TDI 2009-15	VW Touareg TDI 2009-16
	VW Jetta SportWagen TDI 2009-14	Porsche Cayenne Diesel 2013-16
	VW Beetle TDI 2012-15	Audi A6 Quattro TDI 2014-16
	VW Beetle Convertible TDI 2012-15	Audi A7 Quattro TDI 2014-16
	Audi A3 TDI 2010-15	Audi A8 TDI 2014-16
	VW Golf TDI 2010-15	Audi A8L TDI 2014-16
	VW Golf SportWagen TDI 2015	Audi Q5 TDI 2014-16
	VW Passat TDI 2012-15	Audi Q7 TDI 2009-16
<b>FIAT CHRYSLER:</b>		
	Jeep Grand Cherokee EcoDiesel 2014-16	
	Dodge Ram 1500 EcoDiesel 2014-16	
<b>MERCEDES:</b>		
	ML 320 2007-16	R320 2007-16
	ML 350 2007-16	E Class 2007-16
	GL 320 2007-16	GL Class 2007-16
	E320 2007-16	ML Class 2007-16
	S350 2007-16	R Class 2007-16
		S Class 2007-16
		GLK Class 2007-16
		GLE Class 2007-16
		Sprinter 2007-16

43. Bosch participated not just in the development of the defeat device, but also in the scheme to prevent U.S. regulators from uncovering the device's true functionality. Moreover, Bosch's participation was not limited to engineering the defeat device (in a collaboration described as unusually close). Rather, Bosch GmbH and Bosch LLC marketed "clean diesel" in the United States and lobbied U.S. regulators to approve "clean diesel," another highly unusual activity for a mere supplier. These lobbying efforts, taken together with evidence of Bosch's actual knowledge that its software could be operated as a defeat device and

participation in concealing the true functionality of the device from U.S. regulators, can be interpreted only one way under U.S. law: Bosch was a knowing and active participant in a massive, decade-long conspiracy with Volkswagen, Audi, Mercedes, GM, and others to defraud U.S. consumers, regulators, and diesel car purchasers or lessees. Bosch GmbH and Bosch LLC have enabled over 1.3 million vehicles to be on the road in the United States polluting at levels that exceed emissions standards and which use software that manipulate emissions controls in a manner not expected by a reasonable consumer.

44. Robert Bosch GmbH is a German multinational engineering and electronics company headquartered in Gerlingen, Germany. Robert Bosch GmbH is the parent company of Robert Bosch LLC. Robert Bosch GmbH, directly and/or through its North American subsidiary Robert Bosch LLC, at all material times, designed, manufactured, and supplied elements of the defeat device to GM for use in the Polluting Vehicles. Bosch GmbH is subject to the personal jurisdiction of this Court because it has availed itself of the laws of the United States through its management and control over Bosch LLC and over the design, development, manufacture, distribution, testing, and sale of hundreds of thousands of the defeat devices installed in the Polluting Vehicles sold or leased in the U.S. Employees of Bosch GmbH and Bosch LLC have collaborated in the emissions scheme with GM in this judicial district and have been present in this district.

45. Robert Bosch LLC is a Delaware limited liability company with its principal place of business located at 38000 Hills Tech Drive, Farmington Hills, Michigan. Robert Bosch LLC is a wholly owned subsidiary of Robert Bosch GmbH. Robert Bosch LLC, directly and/or in conjunction with its parent Robert Bosch GmbH, at all material times, designed, manufactured, and supplied elements of the defeat device to GM for use in the Polluting Vehicles.

46. Both Bosch GmbH and Bosch LLC (together with Volkmar Denner, “Bosch”) operate under the umbrella of the Bosch Group, which encompasses some 340 subsidiaries and companies. The “Bosch Group” is divided into four business sectors: Mobility Solutions (formerly Automotive Technology), Industrial Technology, Consumer Goods, and Energy and Building Technology. The Mobility Solutions sector, which supplies parts to the automotive industry, and its Diesel Systems division, which develops, manufactures and applies diesel systems, are particularly at issue here and include the relevant individuals at both Bosch GmbH and Bosch LLC. Bosch’s sectors and divisions are grouped not by location, but by subject matter. Mobility Solutions includes the individuals involved in the RICO enterprise and conspiracy at both Bosch GmbH and Bosch LLC. Some individuals worked at both Bosch LLC and Bosch GmbH during the course of the RICO conspiracy. The acts of individuals described in this Complaint have been associated with Bosch GmbH and Bosch LLC whenever possible.

Regardless of whether an individual works for Bosch LLC in the U.S. or Bosch GmbH in Germany, the individuals often hold themselves out as working for “Bosch.” This collective identity is captured by Bosch’s mission statement: “We are Bosch,” a unifying principle that links each entity and person within the Bosch Group.<sup>2</sup> Bosch documents and press releases often refer to the source of the document as “Bosch” without identifying any particular Bosch entity. Thus, the identity of which Bosch defendant was the author of such documents and press releases cannot be ascertained with certainty until Bosch GmbH and Bosch LLC respond to discovery requests in this matter.

47. Bosch holds itself out to the world as one entity: “the Bosch Group.” The Diesel Systems division, which developed the EDC17, is described as part of the Bosch Group. In the case of the Mobility Solutions sector, which oversees the Diesel Systems Group, the Bosch Group competes with other large automotive suppliers.<sup>3</sup>

48. The Bosch publication *Bosch in North America* represents that “Bosch supplies . . . clean-diesel fuel technology for cars and trucks.” Throughout the

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<sup>2</sup> Exhibit 2, Bosch 2014 Annual Report, available at [http://www.bosch.com/en/com/bosch\\_group/bosch\\_figures/publications/archive/archive-cg12.php](http://www.bosch.com/en/com/bosch_group/bosch_figures/publications/archive/archive-cg12.php).

<sup>3</sup> See, e.g., Exhibit 3, Bosch’s 2016 Annual Report, available at [https://assets.bosch.com/media/global/bosch\\_group/our\\_figures/pdf/bosch-annual-report-2016.pdf](https://assets.bosch.com/media/global/bosch_group/our_figures/pdf/bosch-annual-report-2016.pdf), at 23.

document describing its North American operations, the company refers to itself as “Bosch” or “the Bosch Group.”<sup>4</sup>

49. The *Bosch in North America* document proclaims that Automotive Technology is “Bosch’s largest business sector in North America.” In this publication, Bosch never describes the actions of any separate Bosch legal entity, like Bosch LLC, when describing its business, but always holds itself out as “the Bosch Group.”<sup>5</sup>

50. German authorities are now investigating Bosch GmbH and are focusing on certain Bosch employees:<sup>6</sup>

### **Three Bosch Managers Targeted as German Diesel Probe Expands**

A German probe into whether Robert Bosch GmbH helped Volkswagen AG cheat on emissions tests intensified as Stuttgart prosecutors said they were focusing on three managers at the car-parts maker.

While Stuttgart prosecutors didn’t identify the employees, the step indicates that investigators may have found specific evidence in the probe. Previously, prosecutors have said they were looking into the role “unidentified” Bosch employees may have played in providing software that was used to cheat on emission tests.

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<sup>4</sup> Exhibit 4, *Bosch in North America* (May 2007), available at <http://www.bosch.us/content/language1/downloads/BINA07.pdf>, at 2.

<sup>5</sup> *Id.* at 5.

<sup>6</sup> Exhibit 5, *Three Bosch Managers Targeted as German Diesel Probe Expands*, Bloomberg (June 29, 2007), <https://www.bloomberg.com/news/articles/2017-06-29/three-bosch-managers-targeted-as-german-diesel-probe-expands>.

“We have opened a probe against all three on suspicions they aided fraud in connection to possible manipulation in emissions treatments in VW cars,” Jan Holzner, a spokesman for the agency, said in an emailed statement. “All of them are mangers with the highest in middle management.”

Bosch, which is also being investigated by the U.S. Department of Justice, has been caught up in the VW diesel scandal that emerged in 2015 over allegations its employees may have helped rig software that helped the carmaker to cheat emission tests. Earlier this year, Stuttgart prosecutors opened a similar probe into Bosch’s role in connection with emission tests of Daimler cars.

A spokesman for Bosch said that while he can’t comment on individual employees, the company “takes the overall allegations in diesel cases seriously and has been cooperating fully from the beginning of the probes.”

The Stuttgart probe is running parallel to the central criminal investigation in Braunschweig, closer to VW’s headquarters. That investigation is targeting nearly 40 people on fraud allegations related to diesel-emission software, including former VW Chief Executive Officer Martin Winterkorn.

Prosecutors’ interest extends to multiple units in the VW family -- including luxury brands Audi and Porsche. In addition, Stuttgart prosecutors are also reviewing a third case related to Bosch’s cooperation with Fiat Chrysler Automobiles NV on software for diesel engines.

51. Recently researchers from Rohr-Universität in Bochum, Germany, and University of California-San Diego uncovered Bosch’s role in connection with the manipulation of emission controls in certain Volkswagen and FCA vehicles. The researchers found no evidence that Volkswagen and FCA wrote the code that allowed the operation of defeat devices. All the code they analyzed was found in documents copyrighted by Robert Bosch GmbH. These researchers found that in the “function sheets” copyrighted by Robert Bosch GmbH, the code to cheat the

emissions test was labeled as modifying the “acoustic condition” of the engine, a label that helped the cheat fly under the radar. Given that GM cars have a Bosch EDC17 as did the cheating Volkswagen and FCA cars, and given testing by Plaintiffs’ experts described below that reveals defeat devices in GM cars, it is plausible to allege that Bosch was a participant in the scheme to hide the true emissions of Silverados and Sierras, and supplied a similar “function sheet” to GM to enable a similar emission deception.

## **V. FACTUAL ALLEGATIONS**

### **A. The Environmental Challenges Posed by Diesel Engines and the U.S. Regulatory Response Thereto**

52. The United States government, through the Environmental Protection Agency, has passed and enforced laws designed to protect United States citizens from pollution and, in particular, certain chemicals and agents known to cause disease in humans. Automobile manufacturers must abide by these laws and must adhere to EPA rules and regulations.

53. The U.S. Clean Air Act has strict emissions standards for vehicles, and it requires vehicle manufacturers to certify to the EPA that the vehicles sold in the U.S. meet applicable federal emissions standards to control air pollution. Every vehicle sold in the U.S. must be covered by an EPA-issued certificate of conformity.

54. There is a very good reason that these laws and regulations exist, particularly in regards to vehicles with diesel engines: in 2012, the World Health Organization declared diesel vehicle emissions to be carcinogenic and about as dangerous as asbestos.

55. Diesel engines pose a particularly difficult challenge to the environment because they have an inherent trade-off between power, fuel efficiency, and emissions: the greater the power and fuel efficiency, the dirtier and more harmful the emissions.

56. Instead of using a spark plug to combust highly refined fuel with short hydrocarbon chains, as gasoline engines do, diesel engines compress a mist of liquid fuel and air to very high temperatures and pressures, which causes the diesel to spontaneously combust. This causes a more powerful compression of the pistons, which produces greater engine torque (that is, more power).

57. The diesel engine is able to do this both because it operates at a higher compression ratio than a gasoline engine and because diesel fuel contains more energy than gasoline.

58. But this greater energy and fuel efficiency comes at a cost: diesel produces dirtier and more dangerous emissions. One byproduct of diesel combustion is oxides of nitrogen (NO<sub>x</sub>), which includes a variety of nitrogen and oxygen chemical compounds that only form at high temperatures.

59. NO<sub>x</sub> pollution contributes to nitrogen dioxide, particulate matter in the air, and reacts with sunlight in the atmosphere to form ozone. Exposure to these pollutants has been linked with serious health dangers, including asthma attacks and other respiratory illnesses serious enough to send people to the hospital. Ozone and particulate matter exposure have been associated with premature death due to respiratory-related or cardiovascular-related effects. Children, the elderly, and people with pre-existing respiratory illness are at acute risk of health effects from these pollutants. As a ground level pollutant, NO<sub>2</sub>, a common byproduct of NO<sub>x</sub> reduction systems using an oxidation catalyst, is highly toxic in comparison to nitric oxide (NO). If overall NO<sub>x</sub> levels are not sufficiently controlled, then concentrations of NO<sub>2</sub> levels at ground level can be quite high, where they have adverse acute health effects.

60. Though more efficient, diesel engines come with their own set of challenges, as emissions from diesel engines can include higher levels of NO<sub>x</sub> and particulate matter (PM) or soot than emissions from gasoline engines due to the different ways the different fuels combust and the different ways the resulting emissions are treated following combustion. Another way NO<sub>x</sub> emissions can be reduced is through exhaust gas recirculation or “EGR,” whereby exhaust gases are routed back into the intake of the engine and mixed with fresh incoming air. Exhaust gas recirculation lowers NO<sub>x</sub> by reducing the available oxygen increasing

the heat capacity of the exhaust gas mixture and by reducing maximum combustion temperatures; however, EGR can also lead to an increase in PM as well. Another way NO<sub>x</sub> and PM emissions can be reduced is through expensive exhaust gas after-treatment devices, primarily, catalytic converters, which use a series of chemical reactions to transform the chemical composition of a vehicle's NO<sub>x</sub> emissions into less harmful, relatively inert, and nitrogen gas (N<sub>2</sub>), water (H<sub>2</sub>O) and carbon dioxide (CO<sub>2</sub>).

61. Diesel engines thus operate according to this trade-off between price, NO<sub>x</sub>, and PM, and for the EPA to designate a diesel car as a “clean” vehicle, it must produce both low PM and low NO<sub>x</sub>. In 2000, the EPA announced stricter emission standards requiring all diesel models starting in 2007 to produce drastically less NO<sub>x</sub> and PM than years prior. Before introducing an Affected Vehicle into the U.S. stream of commerce (or causing the same), GM was required to first apply for, and obtain, an EPA-administered COC certifying that the vehicle comported with the emission standards for pollutants enumerated in 40 C.F.R. §§ 86.1811-04, 86.1811-09, & 86.1811-10. The CAA expressly prohibits automakers, like GM, from introducing a new vehicle into the stream of commerce without a valid EPA COC. Moreover, vehicles must be accurately described in the COC application “in all material respects” to be deemed covered by a valid COC. California’s emission standards are even more stringent than those of the EPA.

California's regulator, CARB, requires a similar application from automakers to obtain an Executive Order, confirming compliance with California's emission regulations, before allowing the vehicle onto California's roads.

**B. Both the Silverado and Sierra Share a Common Duramax Engine**

62. To meet the EPA emissions requirements applicable to 2011 vehicles GM introduced a new Duramax V8 diesel engine in both the Silverado and Sierra.

63. For the purposes of this complaint, the following terms are used to describe the Duramax engine found in all Silverado and Sierra vehicles at issue in this case. These two models share the same engine test group and are considered by EPA and ARB to have identical engines.

64. Common critical components of the Duramax engine are:

**1. HCI – Hydrocarbon Injector**

65. The hydrocarbon injector (HCI) is located in the turbocharger downpipe. It is simply a fuel injector used to inject diesel fuel into the exhaust stream during active regeneration (cleaning of the diesel particulate filter). This active regeneration strategy is unique as the previous version allowed fuel to be injected into the cylinder during the exhaust stroke instead of utilizing a separate injector.

**2. DOC – Diesel Oxidation Catalyst**

66. The diesel oxidation catalyst (DOC) converts hydrocarbons and carbon monoxide into water and carbon dioxide through an oxidization reaction.

The DOC also converts nitric oxide to nitrogen dioxide to generate favorable conditions for the reduction of NO<sub>x</sub> in the SCR system downstream of the DOC. Finally, the DOC oxidizes fuel injected from the HCI to generate the temperatures required for active regeneration.

### **3. Diesel Exhaust Fluid Injector**

67. The diesel exhaust fluid (DEF) is injected downstream of the DOC. DEF is composed of 32.5% urea (its active ingredient), distilled water, and a very small amount of additives. Because of its urea content, some people call the process “urea injection.” DEF is required for the selective catalytic reduction process to occur. The heat of the exhaust converts the DEF into carbon dioxide and ammonia.

### **4. SCR – Selective Catalytic Reduction**

68. Once DEF is added to the exhaust, it travels through the selective catalytic reduction (SCR) catalyst. Here, oxides of nitrogen (NO<sub>x</sub>) are converted to nitrogen gas (N<sub>2</sub>) and water (H<sub>2</sub>O) by means of a reduction reaction. The SCR system significantly reduces NO<sub>x</sub> emissions, reducing the frequency of active regeneration cycles and allowing for more freedom in the calibration of the engine. The drawback of SCR is its increased complexity and the need to carry and replenish the urea fluid (also known by its trademark name AdBlue).

## **5. DPF – Diesel Particulate Filter**

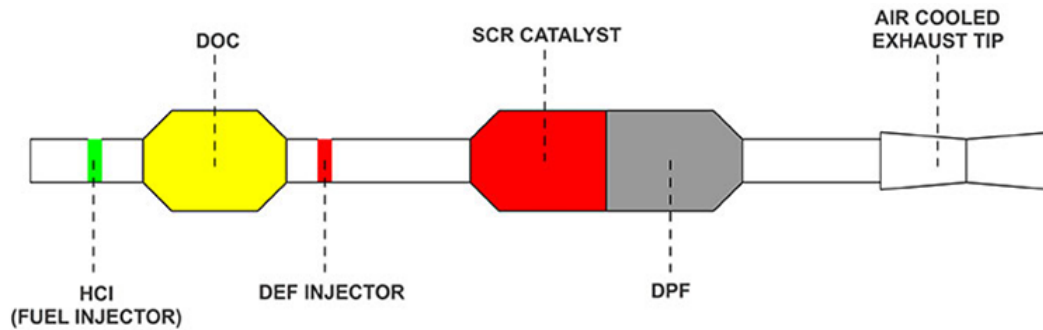
69. Once the exhaust stream has been treated by the DOC and SCR, it travels through the diesel particulate filter (DPF), where particulate matter (soot) is trapped and stored. The DPF is cleaned through a process known as regeneration, which is divided into two strategies. Passive regeneration occurs at any time the vehicle is being operated and the exhaust gas temperature is high enough to burn the particulate matter trapped by the filter. It is a continuously occurring process, meaning that it naturally occurs whenever the conditions are met under normal operation. Active regeneration occurs only when the engine senses that the DPF needs to be cleaned as the DPF is approaching maximum capacity and generating too much exhaust backpressure. When active regeneration occurs, fuel is injected into the exhaust stream via the HCI to increase the exhaust gas temperature so that the particulate matter can be burned off at carbon's non-catalytic oxidation temperature. Active regeneration dramatically reduces fuel economy since fuel is being used for purposes other than moving the vehicle. The exhaust system features a specifically designed air-cooled exhaust tip to reduce the heat of the exhaust gases as they are expelled. While the DPF is highly effective at trapping particulates, as the amount of particulates accumulates, the resistance to air flow increases also, increasing the load of the engine. To purge the DPF of accumulated deposits, it must undergo a regeneration cycle approximately every 500 km, lasting

about 30 minutes. DPF regeneration requires high exhaust temperatures of approximately 600°C that are almost never achieved under normal engine operating conditions. Unfortunately, these conditions may not arise in normal urban driving, requiring the ECU to perform *active regeneration*. In this mode, the ECU adjusts engine operation to increase exhaust temperature to regenerate the DPF; however, if the vehicle is only driven for short distances, such a temperature may never be reached. At sufficiently high soot load, the vehicle will illuminate a special warning lamp, prompting the driver to drive the vehicle at increased speed to allow active regeneration to take place. Thus, while the DPF is highly effective at reducing particulate emissions, it imposes a performance penalty and can become a hassle for owners who drive their vehicle for short distances.

## **6. EGR – Exhaust Gas Recirculation**

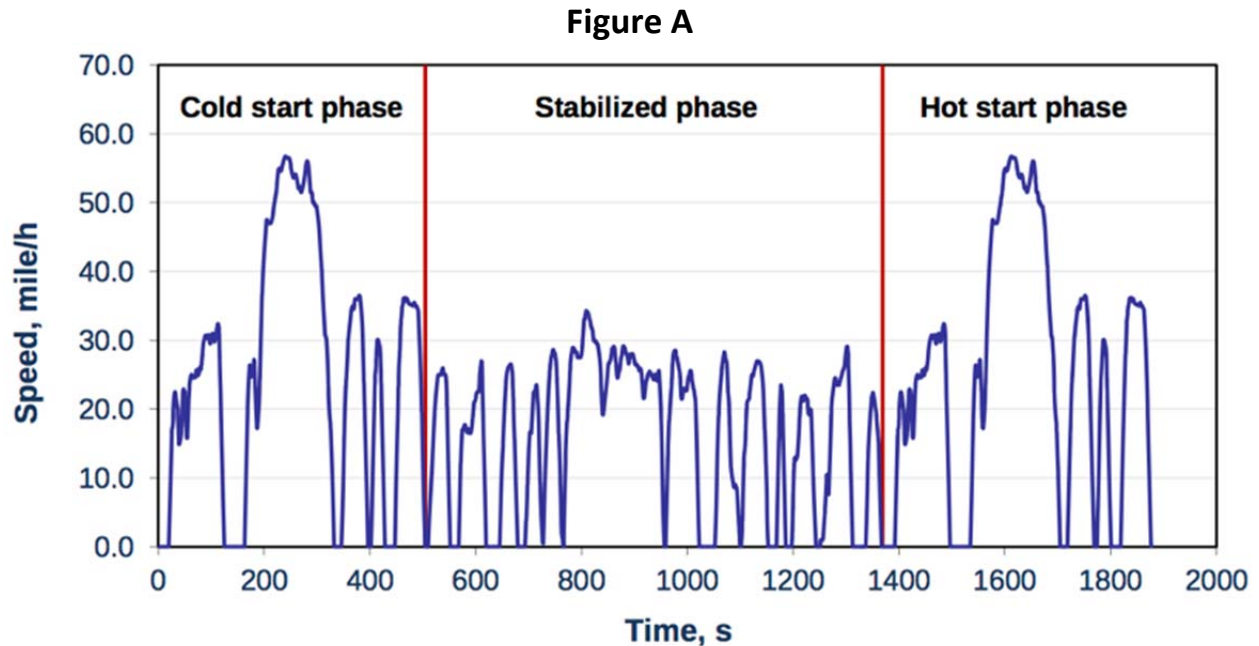
70. Exhaust gas recirculation (EGR) is used to reduce NO<sub>x</sub> emissions. Since oxides of nitrogen form in oxygen rich, high temperature environments, introducing exhaust gases back into the intake air charge reduces the amount of these compounds that form. Exhaust gas recirculation is not a new technology and has been regularly used on diesel engines for many years.

71. The following is a depiction of these components:



### C. Emission Test Cycles and Emission Standards

72. An emissions test cycle defines a protocol that enables repeatable and comparable measurements of exhaust emissions to evaluate compliance. The protocol specifies all conditions under which the engine is tested, including lab temperature and vehicle conditions. Most importantly, the test cycle defines the speed and load over time that is used to simulate a typical driving scenario. An example of a driving cycle is shown in Figure A. This graph represents the FTP-75 (Federal Test Procedure) cycle that has been created by the EPA and is used for emission certification and fuel economy testing of light-duty vehicles in the U.S. The cycle simulates an urban route with frequent stops, combined with both a cold and a hot start transient phase. The cycle lasts 1,877 seconds (about 31 minutes) and covers a distance of 11.04 miles (17.77 km) at an average speed of 21.2 mph (34.12 km/h).



73. Besides urban test cycles such as FTP-75, there are also cycles that simulate driving patterns under different conditions. To assess conformance, several of these tests are carried out on a chassis dynamometer, a fixture that holds a car in place while allowing its drive wheel to turn with varying resistance. Emissions are measured during the test and compared to an emissions standard that defines the maximum pollutant levels that can be released during such a test. In the U.S., emissions standards are managed on a national level by the EPA. In addition, California has its own emissions standards that are defined and enforced by the California Air Resources Board (CARB). California standards are also used by a number of other states (“Section 177” states). Together with California, these states cover a significant fraction of the U.S. market, making them a de facto second

national standard. In Europe, the emissions standards are called Euro 1 through Euro 6, where Euro 6 is the most recent standard—in effect since September 2014.

74. The FTP-75 is the primary dynamometer cycle used to certify the light- and medium-duty passenger cars/trucks. This cycle is primarily a dynamic cycle, with rapid changes in speed and acceleration meant to reflect city driving along with some steadier higher speed sections meant to account for some highway driving.

75. One critically important thing to understand about the FTP-75 is that it's a “cold start” cycle. That means the vehicle starts the cycle with the engine having been off for at least eight hours and in a completely cold state. The “cold start” portion of the test is challenging for diesel engines like the Duramax employing SCR because catalysts meant to control emissions are not yet at temperatures where they work (*i.e.*, above their “light-off” temperature).

**D. GM Profited from Using Multiple Defeat Devices in Its Duramax Diesel Powertrains**

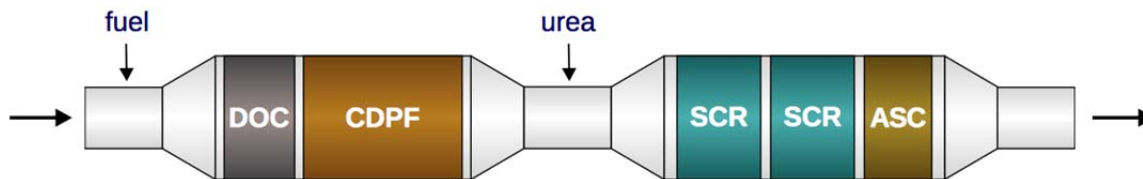
76. As noted, the Duramax exhaust treatment system consists of four components: the Exhaust Gas Recirculation System (EGR); the Diesel Oxidation Catalyst (DOC); the Selective Catalytic Reduction (SCR); and the Diesel Particulate Filter (DPF). The DPF traps particulate pollutants (like soot) but has to regenerate regularly in order to maintain low exhaust backpressure. There are two ways the DPF can regenerate: passively through catalysts built into the components

(Passive Regeneration) that use NO<sub>2</sub> (nitrogen dioxide) as the primary oxidizer, and actively, where the engine and HCl generate temperatures high enough to oxidize trapped carbon via direct (*i.e.*, non-catalytic) oxidation (Active Regeneration). Active Regenerations generally, though not always, require the vehicle to be driven at highway speeds for a continuous period. Active Regeneration reduces fuel economy, decreasing miles per gallon and engine efficiency. Thus, manufacturers like GM seek to minimize Active Regeneration cycles. Active Regeneration also leads to excessive NO<sub>x</sub> and reduces the life span of the SCR catalyst as the high temperatures drive hydrothermal aging and deactivation of the SCR catalyst.

77. Passive regeneration relies on the presence of NO<sub>x</sub> (specifically NO<sub>2</sub>) to catalytically oxidize captured soot. The catalyst oxidizes nitric oxide to nitrogen dioxide, which then reacts at relatively low temperatures to oxidize and remove captured soot. That is, it works best when the exhaust passing through the DPF still contains high levels of NO<sub>x</sub> pollutants that trigger the catalyst to regenerate the filter. As a result, most diesel engine manufacturers put the DOC upstream of the SCR system where NO<sub>x</sub> concentrations are still relatively high and the DPF is more likely to regenerate via the passive regeneration mechanism.<sup>7</sup>

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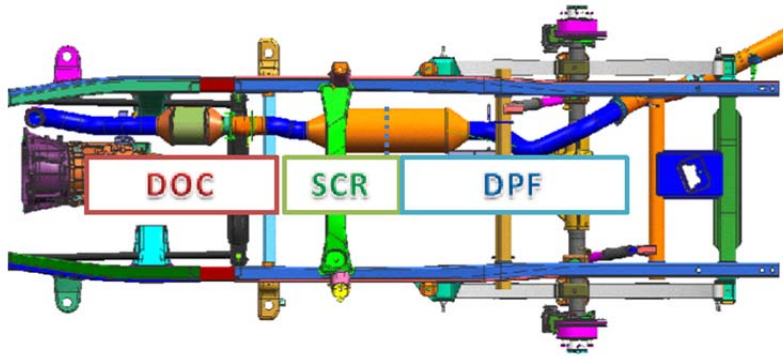
<sup>7</sup> Exhibit 6, Hannu Jääskeläinen et al., *Heavy-Duty Diesel Engines with Aftertreatment*, DieselNet (Dec. 2016), [https://www.dieselnet.com/tech/engine\\_heavy-duty\\_aftertreatment.php](https://www.dieselnet.com/tech/engine_heavy-duty_aftertreatment.php).



**Figure 11.** Schematic of typical US 2010 aftertreatment system

78. While the SCR is very effective at reducing NO<sub>x</sub> emissions, it requires hot exhaust for the urea catalyst to function properly. Thus, when it is placed downstream of the DPF, so as to increase Passive Regeneration and decrease the need for Active Regeneration, the system takes some time to warm up and does not work well when the engine system is cold. The DPF absorbs much of the heat during exhaust warmup and delays the time for the SCR catalyst to reach its light-off temperature.

79. But emissions testing to allow trucks such as those at issue here to be sold in the United States requires a “cold start” emissions measurement. That is, trucks must emit low levels of NO<sub>x</sub> even when they have just started and are not yet operating at high exhaust temperatures. GM did not want to increase Engine Gas Recirculation (EGR) or use other inefficient methods to reduce “cold start” emissions, so it departed from the DOC–DPF–SCR order that other manufacturers use and designed its Duramax engines with the SCR system closer to the engine than the DPF. In the Duramax, the order is as follows:



80. This configuration allows the SCR system to warm up sooner, thus allowing sufficiently reduced NO<sub>x</sub> emissions to pass the cold start test required for certification. But there is a catch. Because the NO<sub>x</sub> is reduced before the exhaust reaches the DPF filter, there is little Passive Regeneration in the DPF. Without relatively high NO<sub>x</sub> levels going into the DPF, more active regenerations would be required, resulting in reduced fuel economy, reduced lifetime of the SCR catalysts, and a significant increase in overall NO<sub>x</sub> emissions.

81. GM was unwilling to leave the lucrative diesel market to other manufacturers. Unknown to GM other manufacturers, like FCA, also were unable to meet the new emission requirements. So, unwilling to be left behind, GM plunged ahead.

82. GM's solution to its problem was to use at least three separate "defeat devices" to increase engine power and efficiency, increase NO<sub>x</sub> levels into the DPF, and decrease the need for Active Regeneration. These defeat devices are explained in detail below. GM could not meet the new and tougher emissions

requirements effective in 2011 without these devices. GM cared not that these defeat devices caused the Duramax engine to emit 1.5 to 5.5 times the permissible limit for deadly NO<sub>x</sub> pollutants during real-world driving.

83. The defeat devices solved GM's problem by decreasing the dosing of urea used by the SCR system and reducing the overall EGR rate: above (Defeat Device 1) and below (Defeat Device 2) the narrow temperature band in which certification testing is performed (68-86°F); and decreasing the dose of the SCR system and rate of EGR (Defeat Device 3) after 5-8 minutes of relatively constant engine speed (which never happens during an emissions test). By decreasing the dosing of urea, the SCR allows more NO<sub>x</sub> to pass through to the DPF, thus increasing Passive Regeneration in the DPF and decreasing the need for Active Regenerations, which reduce fuel economy, reduce the lifetime of the SCR catalysts, and result in significant increases in overall NO<sub>x</sub> emissions. Reduced urea dosing has the added advantage of lower urea consumption, which means lower operating costs and longer service intervals between having to fill the urea catalyst tank.

84. Thus, by putting the SCR in front of the DPF and employing the defeat devices, GM was able to market and sell Duramax-equipped trucks with power and efficiency characteristics that made them very appealing but also caused illegal levels of deadly NO<sub>x</sub> pollution. If GM had not employed illegal defeat

devices, then its trucks would have been less efficient and less powerful, meaning that GM would not have sold as many and would not have been able to charge a premium for them.

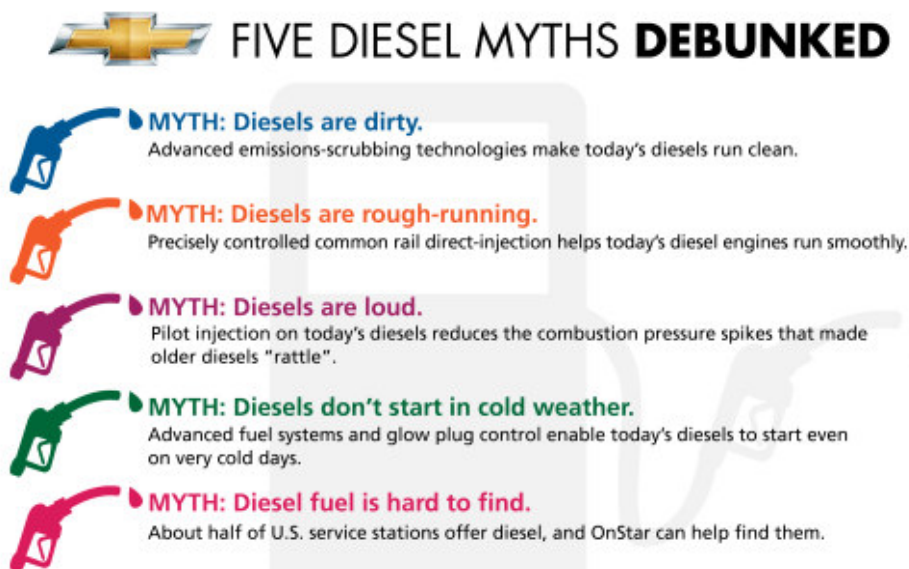
**E. GM Promoted the Silverado and Sierra Duramax as Low Emission Vehicles Because It Knew the Environment Is Material to a Reasonable Consumer**

85. GM understood that a vehicle's pollution footprint is a factor in a reasonable consumer's decision to purchase a vehicle. GM, in press releases, owner's manuals, and brochures that it intended to reach the eyes of consumers, promoted the Duramax engine as delivering "low emissions" or having "reduced NOx emissions." GM was acutely aware of this due to the public perception that diesels are "dirty."

86. Here is an example of GM promoting clean diesel:<sup>8</sup>

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<sup>8</sup> Exhibit 7, *Five Diesel Myths Debunked*, GM, available at [http://www.torquenews.com/sites/default/files/image-119/%5Btitle-raw%5D/dieselmyths\\_v2.jpg](http://www.torquenews.com/sites/default/files/image-119/%5Btitle-raw%5D/dieselmyths_v2.jpg) (last accessed May 24, 2017).



87. The following are examples of GM advertising promoting lower emissions, power, and fuel economy.

1. **Silverado advertising promises “a remarkable reduction” in emissions and fuel economy.**

88. GM’s brochure for the Sierra Duramax engine promised “low emissions” and “great power”:<sup>9</sup>

### **DIRECT INJECTION TECHNOLOGY**

For fast starts in cold weather, quiet operation and maximum efficiency, the direct injection system helps Sierra HD with the available DURAMAX diesel engine start in as little as 3 seconds at -40°C and operates at nearly 30,000 psi to turn heavy diesel fuel into a fine mist, delivering *low emissions and great power*.

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<sup>9</sup> Exhibit 8, 2016 Sierra 2500, GMC, <http://www.gmc.com/previous-year/sierra-2500hd-pickup-truck.html> (last accessed May 24, 2017) (emphasis added).

89. A 2011 Silverado GM publication promised a 63% reduction in emissions over the previous model and more horsepower and torque.<sup>10</sup>

**New system reduces tailpipe NOx emissions**

The enhanced, legendary Duramax 6.6L Turbo-Diesel is the most powerful Duramax ever built-generating more horsepower and torque than any competitor. This proven powerplant gets the job done while being *friendlier to the environment*.

The improved Duramax uses the *latest emission control technology, reducing Nitrogen Oxide (NOx) emissions by a whopping 63%*, when compared to the 2010 model. GM engineers determined the best way to accomplish *this remarkable reduction of diesel emissions was to* employ a Selective Catalytic Reduction (SCR) system that uses Diesel Exhaust Fluid (DEF).

**Diesel exhaust fluid (DEF)**

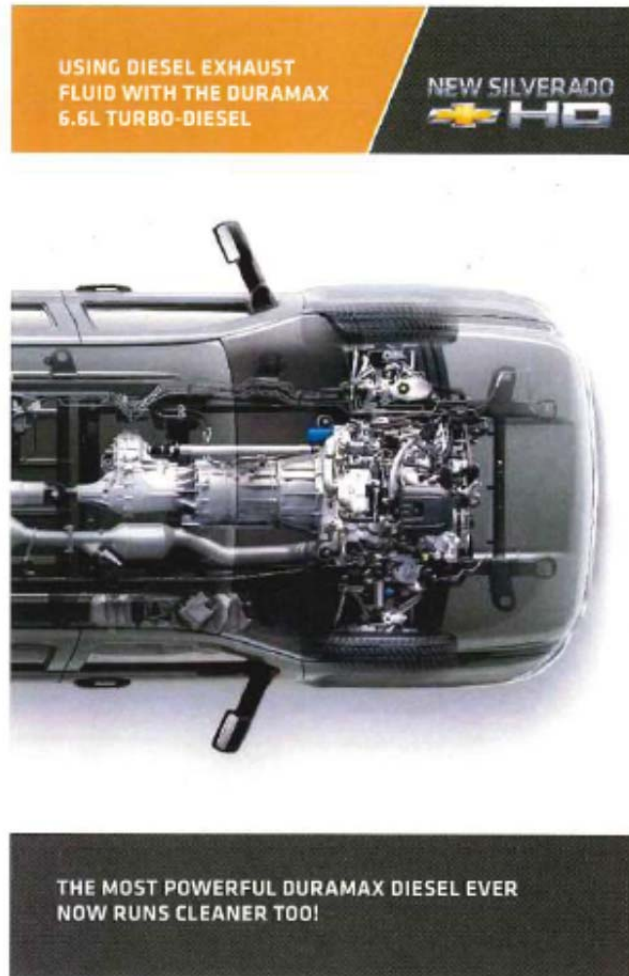
Diesel Exhaust Fluid (DEF) is a non-flammable fluid comprised of 33% ammonia-based urea and 67% purified water. DEF is used with diesel engine exhaust systems to reduce the amount of emissions produced by turning Nitrogen Oxide (NOx) into nitrogen and water vapor. DEF technology has a proven track record since it has been used in Europe for years.

90. The GM 2011 publication represented that the Duramax “runs cleaner.”<sup>11</sup>

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<sup>10</sup> Exhibit 9, *Using Diesel Exhaust Fluid with the Duramax 6.6L Turbo-Diesel*, Chevrolet (emphasis added).

<sup>11</sup> *Id.*



91. The publication went into detail concerning emissions reduction:<sup>12</sup>

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<sup>12</sup> *Id.*

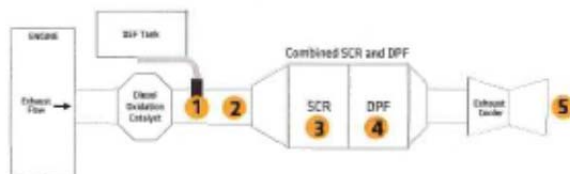


### SELECTIVE CATALYTIC REDUCTION (SCR)

The SCR system is an after-treatment system, since it treats the vehicle's exhaust after combustion.

Here's how it works:

- 1 A fine mist of DEF is injected into the exhaust while the engine is running.
- 2 The heat from the exhaust converts the DEF into ammonia.
- 3 When the ammonia, mixed with exhaust gases, reaches the SCR catalyst, the NOx emissions are broken down.
- 4 The Diesel Particulate Filter (DPF) then captures soot to incinerate it during regeneration cycles.
- 5 Water vapor, nitrogen and reduced emissions exit the exhaust system.



92. The 2011 document contained additional information on reducing emissions:<sup>13</sup>



### DIESEL EXHAUST FLUID (DEF)

Diesel Exhaust Fluid (DEF) is a non-flammable fluid comprised of 33% ammonia-based urea and 67% purified water. DEF is used with diesel engine exhaust systems to reduce the amount of emissions produced by turning Nitrogen Oxide (NOx) into nitrogen and water vapor. DEF technology has a proven track record since it has been used in Europe for years.

<sup>13</sup> *Id.*

93. A 2011 advertisement for the Duramax engine stated:<sup>14</sup>

**6.6L Duramax LML  
Duramax LML SPECS & INFO**

The LML Duramax was released for 2011 model General Motors & Chevrolet HD trucks. The latest version of the 6.6L Duramax requires *advanced emissions equipment*, including the use of diesel exhaust fluid injection, to *reduce nitrogen oxide emission levels by 63 percent* over LMM powered trucks.

94. Elsewhere, this document promises a reduction in NOx:<sup>15</sup>

**LML Duramax DEF**

The LML Duramax is equipped with a SCR system that requires the use of DEF (diesel exhaust fluid). DEF is injected into the exhaust stream where a chemical reaction occurs that reduces NOx emissions. The DEF tank is approximately 5 gallons (18.9 liters). On pickup trucks, the DEF tank fill nozzle is located on the passenger side, under the hood and is sealed by a blue cap. On vans, the DEF tank fill nozzle is located in the fuel fill door, and is also sealed by a blue cap. The DEF system will illuminate a warning indicator in the instrument panel when the DEF fluid levels range is estimated to be 1,000 miles. Subsequent warnings will follow.

95. A press release for the 2013 Silverado 2500 and 3500 indicates that “Highlights of the Duramax diesel include . . . greater fuel efficiency, improved performance and reduced emissions.”<sup>16</sup>

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<sup>14</sup> Exhibit 10, *6.6L Duramax LML*, Duramax Hub, <http://www.duramaxhub.com/lml.html> (last accessed May 24, 2017) (emphasis added).

<sup>15</sup> *Id.*

<sup>16</sup> Exhibit 11, GM Press Release, *Chevrolet Silverado 2500HD and 3500HD*, available at <https://media.gm.com/content/media/us/en/chevrolet/vehicles/>

96. A brochure for the 2014 Silverado promised fuel efficiency and lower emissions:<sup>17</sup>

### **FUEL EFFICIENCY**

On the Vortec 6.0L V8 engine, Variable Valve Timing (VVT) adjusts airflow in and out of the combustion chamber under all engine speeds, which helps lower emissions and improve fuel economy.

### **2. Sierra advertising promises emissions and fuel economy.**

97. The Sierra 2500 and 3500 was introduced in 2011. GMC promised that the Duramax Diesel “delivers 11 percent better highway fuel economy than previous models.” GMC also promised that the engine turned the diesel by-product into a fine mist that results in “lower emissions”:<sup>18</sup>

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[silveradohd/2013/\\_jcr\\_content/iconrow/textfile/file.res/13\\_PG\\_Chevrolet\\_SilveradoHD.pdf](#) (last accessed Aug. 3, 2017).

<sup>17</sup> Exhibit 12, 2014 Silverado HD brochure, at 5.

<sup>18</sup> Exhibit 13, 2011 GMC Sierra Heavy Duty brochure, available at [https://www.gmc.com/content/dam/GMC/global/master/nscwebsite/en/home/Tools/Download\\_A\\_Brochure/01\\_Images/2011-sierra-2500-and-3500-brochure.pdf](https://www.gmc.com/content/dam/GMC/global/master/nscwebsite/en/home/Tools/Download_A_Brochure/01_Images/2011-sierra-2500-and-3500-brochure.pdf) (last accessed Aug. 3, 2017).

DURAMAX DIESEL 6.6L V-8 TURBO - ALLISON 1000 SERIES 6-SPEED AUTOMATIC

## OFF-THE-CHART POWER. OFF-THE-MAP RANGE.

The available new Duramax Diesel 6.6L V-8 Turbo and Allison 1000 Series 6-speed automatic transmission are engineered to achieve a goal that most assumed to be impossible: improving power and mileage, together. Advanced diesel direct-injection technology and an adaptive transmission controller help Duramax to run at peak efficiency, and provide you with a highway mileage range of up to 680 highway miles.<sup>19</sup>

FIGURE 7: IMPROVED FUEL ECONOMY



STARTS IN 3.0 SECONDS. AT -40° F.

A diesel that starts easily in Arctic-like weather? It's all in a cold-day's work for the Duramax Diesel 6.6L V-8 Turbo. With an advanced Direct-Injection (DI) fuel system, the Duramax injectors pressurize fuel up to 30,000 psi. That helps to turn cold, heavy diesel fuel into an ultra-fine mist that burns quickly and easily, to give you fast starts, quieter operation and lower emissions than the previous model.

98. GM's advertising for the Sierra consistently featured claims of "low emissions" and great power:<sup>19</sup>

### 2016 GMC Sierra 2500HD

#### DIRECT INJECTION TECHNOLOGY

For fast starts in cold weather, quiet operation and maximum efficiency, the direct injection system helps

<sup>19</sup> Exhibit 8, 2016 Sierra 2500, GMC, <http://www.gmc.com/previous-year/sierra-2500hd-pickup-truck.html> (last accessed May 24, 2017) (emphasis added).

Sierra HD with the available Duramax diesel engine start in as little as 3 seconds at -40°C and operates at nearly 30,000 psi to turn heavy diesel fuel into a fine mist, delivering *low emissions and great power*.

99. An owner's manual for the 2011 Duramax vehicles promised a "whopping reduction" in emissions:<sup>20</sup>

**NEW SYSTEM REDUCES TAILPIPE NO<sub>x</sub> EMISSIONS**

The enhanced, legendary Duramax 6.6L Turbo-Diesel is the most powerful Duramax ever built-generating more horsepower and torque than any competitor. This proven powerplant gets the job done while being friendlier to the environment.

The improved Duramax uses the latest emission control technology, reducing Nitrogen Oxide (NO<sub>x</sub>) emissions by a *whopping* 63%, when compared to the 2010 model. GM engineers determined the best way to accomplish this *remarkable reduction of diesel emissions* was to employ a Selective Catalytic Reduction (SCR) system that uses Diesel Exhaust Fluid (DEF).

100. A 2011 GM press release promised more power and lower emissions:<sup>21</sup>

New 6.6L Duramax diesel delivering more power, up to 11-percent greater highway fuel economy up to 63-percent lower emissions, B20 biodiesel capability and quicker acceleration

101. Another example, from the 2015 GMC Sierra 2500HD brochure, promises "lower emissions":<sup>22</sup>

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<sup>20</sup> Exhibit 9, *Using Diesel Exhaust Fluid with the Duramax 6.6L Turbo-Diesel*, Chevrolet (emphasis added).

<sup>21</sup> Exhibit 14, 2011 GMC Sierra 2500HD Denali 2500HD highlights and information, GMC Pressroom, [http://media.gmc.com/media/us/en/gmc/vehicles/sierra\\_hd/2011.brand\\_gmc.html](http://media.gmc.com/media/us/en/gmc/vehicles/sierra_hd/2011.brand_gmc.html) (last accessed May 24, 2017).

FOR FASTER STARTS IN COLD WEATHER, QUIETER OPERATION AND MAXIMUM EFFICIENCY, DIRECT INJECTION HELPS THE AVAILABLE DURAMAX DIESEL START IN AS LITTLE AS 3.0 SECONDS AT -40QF AND OPERATE AT NEARLY 30,000 PSI TO TURN HEAVY DIESEL FUEL INTO A FINE MIST, ***BURNING CLEANER AND FASTER WITH LOWER EMISSIONS AND GREATER POWER*** THAN THE PREVIOUS MODEL.

102. An advertisement for the 2014 GMC Sierra 2500HD promises “lower emissions”:<sup>23</sup>

Duramax HIGH-PRESSURE DIRECT INJECTION For fast starts in cold weather, quieter operation and maximum efficiency, the direct-injection system operates at nearly 30,000 psi to turn heavy diesel fuel into a fine mist, *burning clean and fast with lower emissions*.

103. An advertisement for the 2013 GMC Sierra 2500HD promises “reduced emissions and a better fuel budget”:<sup>24</sup>

Duramax B20 BIODIESEL CAPABILITY To reduce carbon dioxide emissions and stretch your fuel budget, the Duramax 6.6L can operate on B20 biodiesel a mix of 20 percent biodiesel from domestic, renewable resources, and 80 percent petroleum diesel.

104. An advertisement for the 2012 GMC Sierra 2500HD promises “clean and lower emissions”:<sup>25</sup>

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<sup>22</sup> Exhibit 15, 2015 GMC Sierra 2500HD brochure, available at [http://www.auto-brochures.com/makes/GMC/Sierra/GMC\\_US%20SierraHD\\_2015-2.pdf](http://www.auto-brochures.com/makes/GMC/Sierra/GMC_US%20SierraHD_2015-2.pdf) (last accessed May 24, 2017) (emphasis added).

<sup>23</sup> Exhibit 16, 2014 GMC Sierra 2500HD brochure, available at [http://www.auto-brochures.com/makes/GMC/Sierra/GMC\\_US%20SierraHD\\_2014.pdf](http://www.auto-brochures.com/makes/GMC/Sierra/GMC_US%20SierraHD_2014.pdf) (last accessed May 24, 2017) (emphasis added).

<sup>24</sup> Exhibit 17, 2013 GMC Sierra 2500HD brochure, available at [http://www.auto-brochures.com/makes/GMC/Sierra/GMC\\_US%20Sierra\\_2013.pdf](http://www.auto-brochures.com/makes/GMC/Sierra/GMC_US%20Sierra_2013.pdf) (last accessed May 24, 2017).

Duramax HIGH-PRESSURE DIRECT INJECTION For fast starts in cold weather, quieter operation and maximum efficiency, the direct injection system operates at nearly 30,000 psi to turn heavy diesel fuel into a fine mist, burning clean and fast with lower emissions and greater power than the previous model.

105. A brochure for the 2013 Sierra promotes “cleaner” emissions:

**DURAMAX HIGH-PRESSURE DIRECT INJECTION**

For fast starts in cold weather, quieter operation and maximum efficiency, the direct injection system operates at nearly 30,000 psi to turn heavy diesel fuel into a fine mist, burning cleaner and faster with lower emissions and greater power than the previous model.

106. A brochure for the 2014 Sierra promises to have been “born of a strict adherence to engineering excellence,” and lower emissions:

**DURAMAX HIGH-PRESSURE DIRECT INJECTION**

For fast starts in cold weather, quieter operation and maximum efficiency, the direct-injection system operates at nearly 30,000 psi to turn heavy diesel fuel into a fine mist, burning clean and fast with lower emissions.

**F. The Deception**

**1. The 2013 Silverado 2500 diesel test setup.**

107. Plaintiffs have extensively tested a 2013 Silverado 2500 diesel using a Portable Emissions Measurement System (PEMS).

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<sup>25</sup> Exhibit 18, 2012 GMC Sierra 2500HD brochure, available at [http://www.auto-brochures.com/makes/GMC/Sierra/GMC\\_US%20Sierra 2012.pdf](http://www.auto-brochures.com/makes/GMC/Sierra/GMC_US%20Sierra%202012.pdf) (last accessed May 24, 2017).

108. The vehicle is representative of the class of Duramax diesel engines present in both the Chevrolet Silverado and GMC Sierra model years 2011 to 2016. The population of both the 2500 series and 3500 is large, though the population will most certainly be dominated by the 2500 series. For this reason, a 2500 series was chosen.

109. The vehicle as acquired had approximately 51,000 miles. It is therefore less than mid-way through its full useful life and is still covered under the emissions warranty. Furthermore, the vehicle was factory certified at the time of purchase.

110. The vehicle went through a rigorous check-in process. The vehicle was placed on a hydraulic rack, the underbody cowlings were removed, and the emission control system was examined to confirm the configuration was as expected and that parts were intact and free from damage. The emissions tag was analyzed and compared to the expected emission control group to ensure beyond a shadow of a doubt that the right engine was present and is being compared to the right certified emission standard.

111. The vehicle was also checked for engine faults and maintenance to ensure the maintenance records are clean and that there are no fault codes related to the emission control system. In this case, the vehicle purchased was factory certified, as previously mentioned.

112. The tire pressure and vehicle weight were checked, and the vehicle was loaded to the weight for the test configuration, in this case 9,500 lbs, so that the configuration is equivalent to the certification configuration.

**2. Initial results indicate higher than expected emissions.**

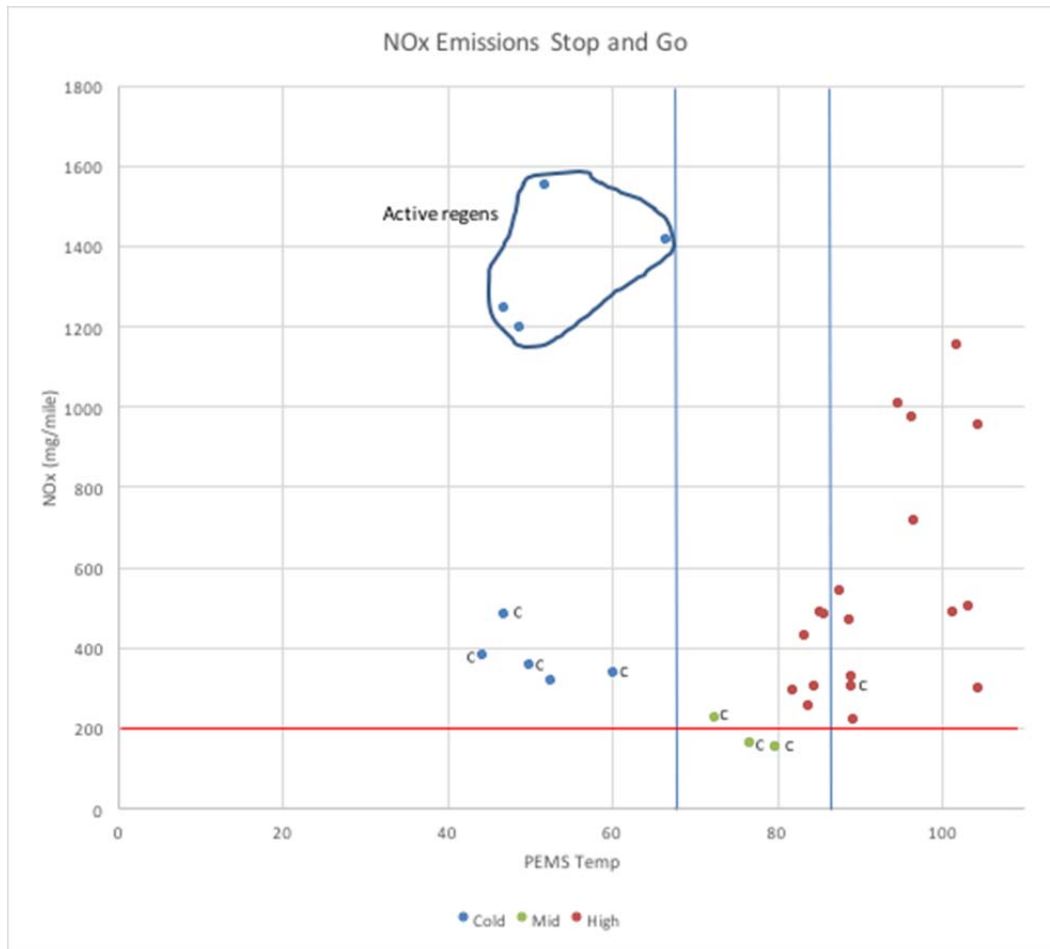
113. Testing confirmed that the vehicle complies with emissions standards at the temperature windows where the emissions test is performed for certification. But the NOx emissions increase significantly when the temperature is below 68°F or above 86°F. This means that GM, using software supplied by Bosch, employs a “defeat device” that allows the vehicle to meet emissions standards in the test temperature range. At all other times, NOx is allowed to be emitted in a much greater amount.

114. Plaintiffs’ experts created a special program that is specific to each vehicle to allow communication with the vehicle’s computer (ECM) in order to extract important operational information like exhaust temperatures, EGR rates, NOx concentrations upstream of the SCR catalysts, and other information the vehicle’s computer might collect.

115. The Silverado was certified at 100 mg/mile for the highway fuel economy standard test (HWFET), where the standard is 400 mg/mile. Initial testing at steady 60 mph speeds indicated emissions of 533 mg/mile on flat roads or 1.3

times the standard. The Silverado's emission on flat roads for the stop and go standard was 538 mg/mile or 2.7 times the standard of 200 mg/mile.

116. Further testing was done in stop and go conditions with average speeds and relative positive acceleration values that correlate well with the FTP-75 emissions cycle. The blue dots show data where the defeat device below 68°F is active; the green dots represent conditions within the certification temperature window (68°F-86°F); the red dots represent data where the defeat device above 86°F is active. The vertical blue lines represent the temperature limits of the test standard for the test cycle, while the horizontal red line represents the emission standard.



117. One important point must be emphasized in analyzing this data. The PEMS temperature sensor, which collects ambient temperature data, is mounted on top of the vehicle (*i.e.*, at roof level), shielded from the sun by horizontal white metal fins, and well ventilated. This is the ideal setup to collect the true ambient temperature of the surroundings without complication from the sun's radiant heat or stagnant heating because of poor flow.

118. The vehicle's ambient temperature sensor, by contrast, is usually mounted in front of the radiator close to the road. These sensors are not necessarily

shielded from the sun and are highly susceptible to false readings at high ambient temperatures from heat generated by hot black top.

119. When it comes to a defeat device based on ambient temperature, obviously the vehicle will be using its own sensors to trigger the defeat. There are several temperature sensors in the intake manifold for the engine, any combination of which could be used to trigger a defeat device (in addition to the possible use of the ambient temperature sensor). The temperature sensors may not directly measure ambient temperature but are certainly related to ambient temperature. Therefore, the cutoff temperatures, as measured by the PEMS ambient temperature sensor, are not necessarily exactly 68°F or 86°F.

120. It should be noted that the effect of ambient temperature on the inlet NOx concentrations, the inlet temperature to the SCR catalyst, and outlet temperature of the SCR catalyst were studied to rule out the possibility of delayed light-off because of low ambient temperature. When compared to cold start conditions within the certification temperature window, the cold start temperatures into and out of the SCR catalyst as well as the NOx concentrations into the SCR catalyst were found to be the same. Thus, the effect of ambient temperature on its own was ruled out as the cause of the high cold start emissions at cold temperature. Clearly, the engine was programmed to produce higher emissions at temperatures below 68°F.

121. The points labeled with a “C” are cold start tests, with distances, RPAs (relative positive accelerations), average speeds, and overall distance that represent very well the characteristics of the FTP-75 certification cycle. In the case of temperatures below 68°F, cold start emissions exceed the standard by a factor of 2.1 at 428 mg/mile of NO<sub>x</sub> with a maximum of 483 mg/mile. During active regenerations, emissions are 1,402 mg/mile on average, or 7 times the emission standard. In the certification temperature window, cold start emissions are 178 mg/mile, which is close to the certification emissions of 200 mg/mile and below the standard of 200 mg/mile. At temperatures above 86°F, cold start emissions were not examined in great detail because hot start emissions were so far in excess of the standard. On average, emissions above 86°F are 479 mg/mile (2.4 times the standard), with excursions as high 1,153 mg/mile (5.8 times the standard).

122. It should be noted, significantly, that the same high temperature behavior was observed in the Chevrolet Cruze and is part of that vehicle’s defeat strategy. Given that the Silverado is a Chevrolet product, it is not surprising that the same defeat strategy was employed.

123. Based on a study of temperatures in 30 major metropolitan areas as well as the demographics of Silverado sales, it is estimated that the high temperature defeat device is active 30-35% of the total population vehicle miles traveled (VMT). Similar estimates show that the cold temperature defeat device is

active approximately 35% of the VMT. In total, these two defeat devices are active 65-70% of VMT with emissions that are 2.1 to 5.8 times the standard.

124. This type of emissions performance is not what a reasonable consumer would expect from a vehicle that “turns NO<sub>x</sub> into nitrogen and water vapor,” or “into a fine mist,” or “reduces emissions by a whopping amount.”

**3. Further testing demonstrates that GM—enabled by Bosch’s EDC17—employs three defeat devices.**

125. Further testing was conducted so that the vehicle was tested for over 3,500 miles and over a wide range of conditions.

126. Testing confirms the existence of three “defeat devices.” The three cheats, or defeat devices, are:

**Defeat Device One:**

The vehicles produce emissions above the certification tests at temperatures above the certification range (86°F).

**Defeat Device Two:**

The vehicles produce higher emissions when temperatures are below the certification test range (68°F).

**Defeat Device Three:**

Higher emissions occur after the vehicle has been run for 200-500 seconds of steady speed operation on average by a factor of 4.5 in all temperature windows.

**a. Defeat Devices One and Two: the Temperature Defeat Devices**

127. The test results for Defeat Device One, in stop and go testing with temperatures above 86°F, are 2.4 times the emissions standard, with maximum measured emissions of 1,153 mg/mile or 5.8 times the standard.

128. The test results for Defeat Device Two, in stop and go testing at temperatures below 68°F, were 2.1 times the emissions standard.

129. Further testing at temperatures below 68°F reveals that the vehicle has several active regenerations. Such regenerations are on average 7 times the emissions standard.

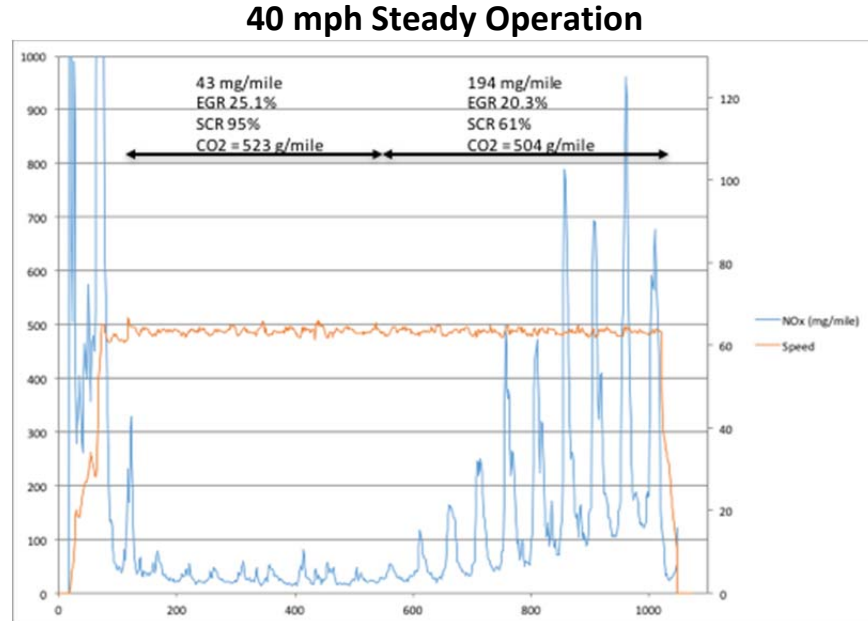
**b. Defeat Device Three: the Steady Speed Time-Out Defeat**

130. In controlled track testing at steady speed, following at steady speeds of 40, 50, and 60 mph, the following observations were made. The blue line represents the NOx emissions in mg/mile, while the orange line shows vehicle speed in km/hour. What is clear is that NOx emissions increase over time and markedly about 500 seconds after the steady speed is achieved (40 mph in this case). This is counterintuitive as, if anything, emissions performance should improve as the catalyst warms ups. *It should be noted, importantly, that this data was taken at ambient temperatures in the certification test window.*

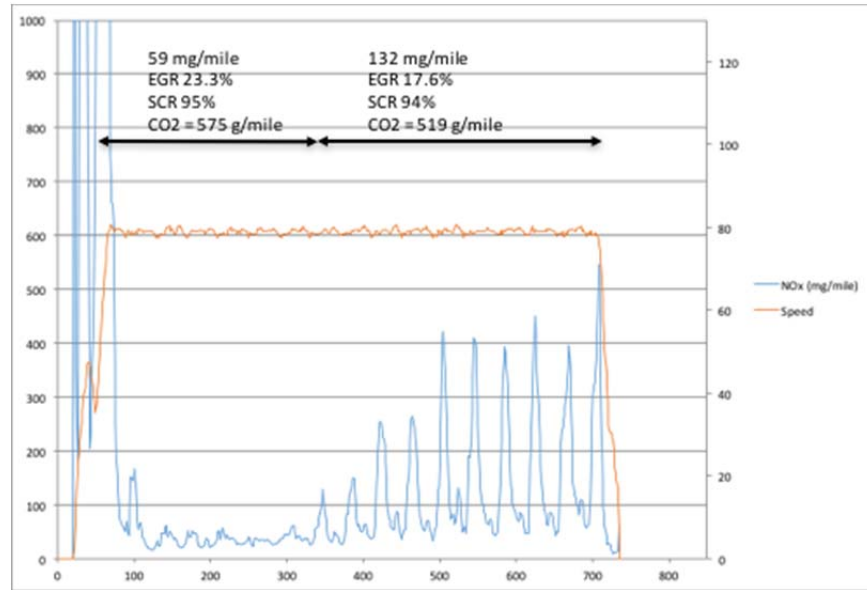
131. In this case, the emissions increase by about a factor of 4, while the EGR rate and SCR reduction are significantly reduced. Note that CO<sub>2</sub> emissions go down, which would be reflected in better fuel economy.

132. The motivation for such a defeat is simple. It increases the NO<sub>x</sub> going into the DPF, thereby ensuring better passive regeneration performance and, perhaps just as important, better fuel economy. Furthermore, decreasing the effectiveness of the SCR system economizes urea usage, which leads to improved customer satisfaction. Lower EGR rates and higher NO<sub>x</sub> mode are generally associated with better fuel economy.

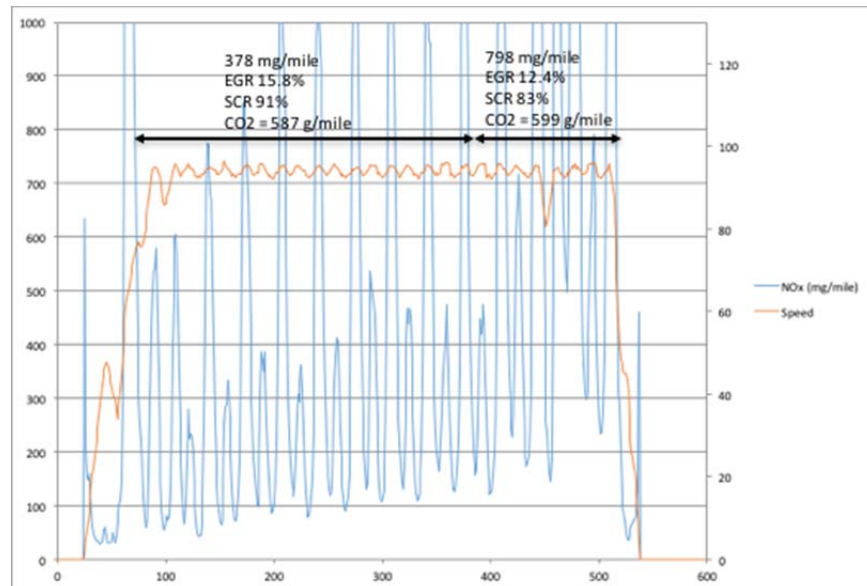
133. An example of this timing defeat device is depicted below:



134. The same behavior is observed in the 50 mph test. Again, a large increase in emissions (factor of 2.2) with a drop in EGR rate, a small decrease in SCR rate, and a decrease in CO<sub>2</sub> emissions (*i.e.*, better fuel economy).



135. At 60 mph, the same phenomenon was observed. Emissions double, while EGR rate and SCR reduction go down.



136. After observing this behavior on the test track, experts reviewed previous over-the-road test data in a variety of steady speed conditions (mostly at approximately 60 mph) and found at least 22 instances where the same time phenomenon occurred.

137. The following table summarizes the events:

<b>Condition</b>	<b>Ambient Temp. (°F)</b>	<b>Event #</b>	<b>Pre timeout NOx (mg/mile)</b>	<b>After timeout NOx (mg/mile)</b>	<b>Factor Increase</b>	<b>Increase in NOx (mg/mile) from pre-timeout condition</b>
Downhill 0.7%	55.5	<b>1</b>	200	422	2.1	222
Downhill 0.4%	77.3	<b>2</b>	274	360	1.3	86
Flat	47	<b>3</b>	344	512	1.5	168
Uphill 0.7%	63.6	<b>4</b>	62	197	3.2	135
Mild Hills	63	<b>5</b>	442	531	1.2	89
Downhill 0.7%	52.5	<b>6</b>	17	276	16.2	259
Flat	47.6	<b>7</b>	21	191	9.1	170
Downhill 0.4%	48.3	<b>8</b>	94	372	4.0	278
Downhill 0.6%	53.3	<b>9</b>	47	265	5.6	218
Downhill 0.5%	62.9	<b>10</b>	149	408	2.7	259
Flat	78.8	<b>11</b>	152	273	1.8	121
Downhill 1.3%	70	<b>12</b>	152	596	3.9	444
Uphill 1.3%	64.9	<b>13</b>	177	1428	8.1	1251
Slight hills	68.8	<b>14</b>	129	286	2.2	157
Downhill 0.5%	62.6	<b>15</b>	37	203	5.5	166
Downhill 0.4%	73	<b>16</b>	72	393	5.5	321
Flat	75.3	<b>17</b>	27	168	6.2	141

Condition	Ambient Temp. (°F)	Event #	Pre timeout NOx (mg/mile)	After timeout NOx (mg/mile)	Factor Increase	Increase in NOx (mg/mile) from pre-timeout condition
Downhill 0.7%	90.1	18	28	309	11.0	281
Downhill 0.3%	87.9	19	61	164	2.7	103
Downhill 0.2%	88.4	20	94	231	2.5	137
Downhill 1.4%	67.3	21	475	778	1.6	303
Downhill 0.3%	102.5	22	291	442	1.5	151
				Average	4.5	248

138. The key conclusion here is that this defeat device appears to be active at all temperatures. *In general, the “timeout” defeat device results in a factor of 4.5 increase in NOx once activated.* The exact time for the defeat device to activate varies, but is generally 200-500 seconds. At steady speed, the average increase in NOx once the defeat device kicks in is 248 mg/mile.

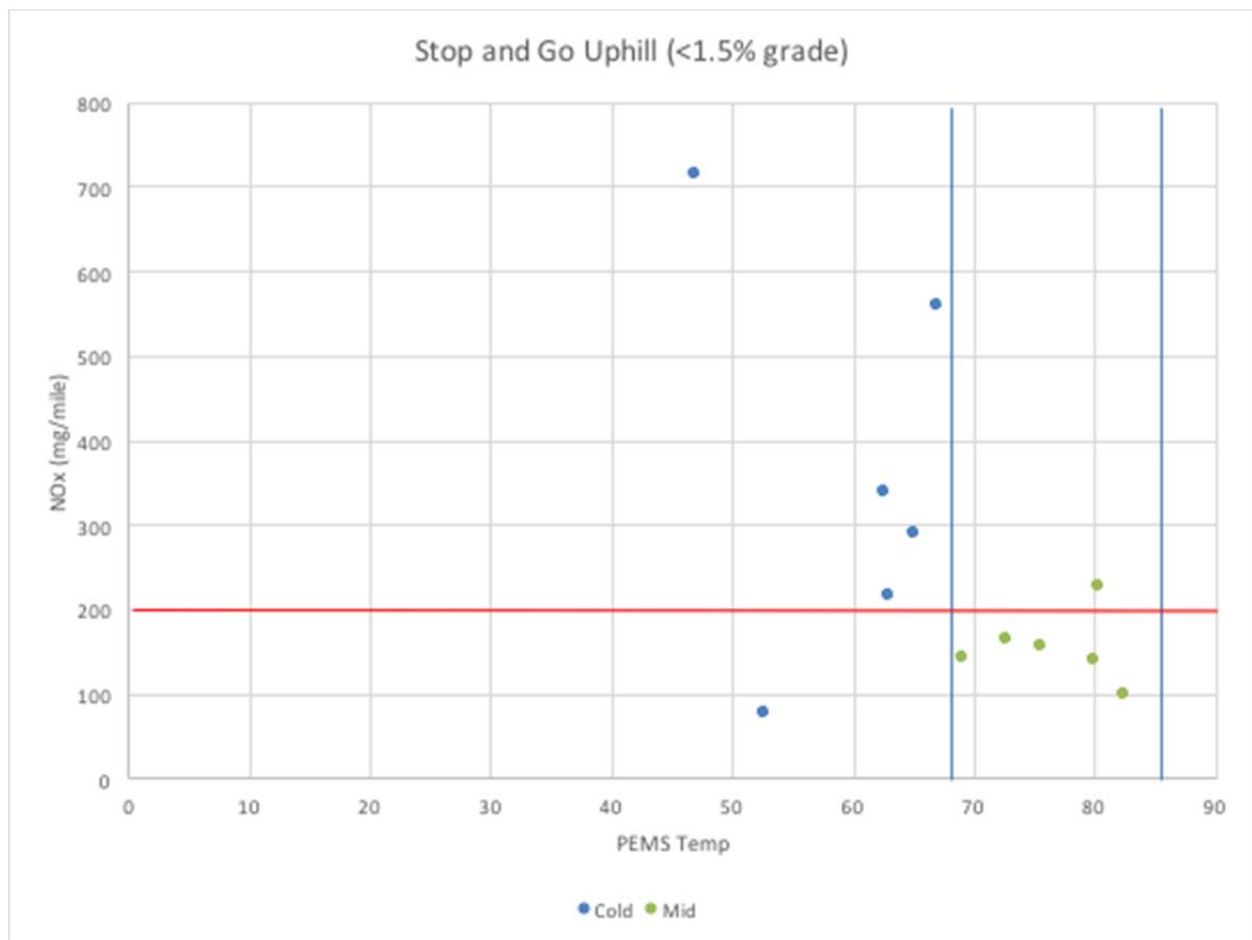
139. On average, there is a reduction in the EGR rate (from 18.9% to 17.9% pre- and post-timer) and SCR effectiveness (from 90% to 74% pre- and post-timer). The de-rated use of the SCR system would result in significant savings in urea and would also ensure better operation of the downstream DPF.

#### **4. The vehicles pollute heavily when driven on hills.**

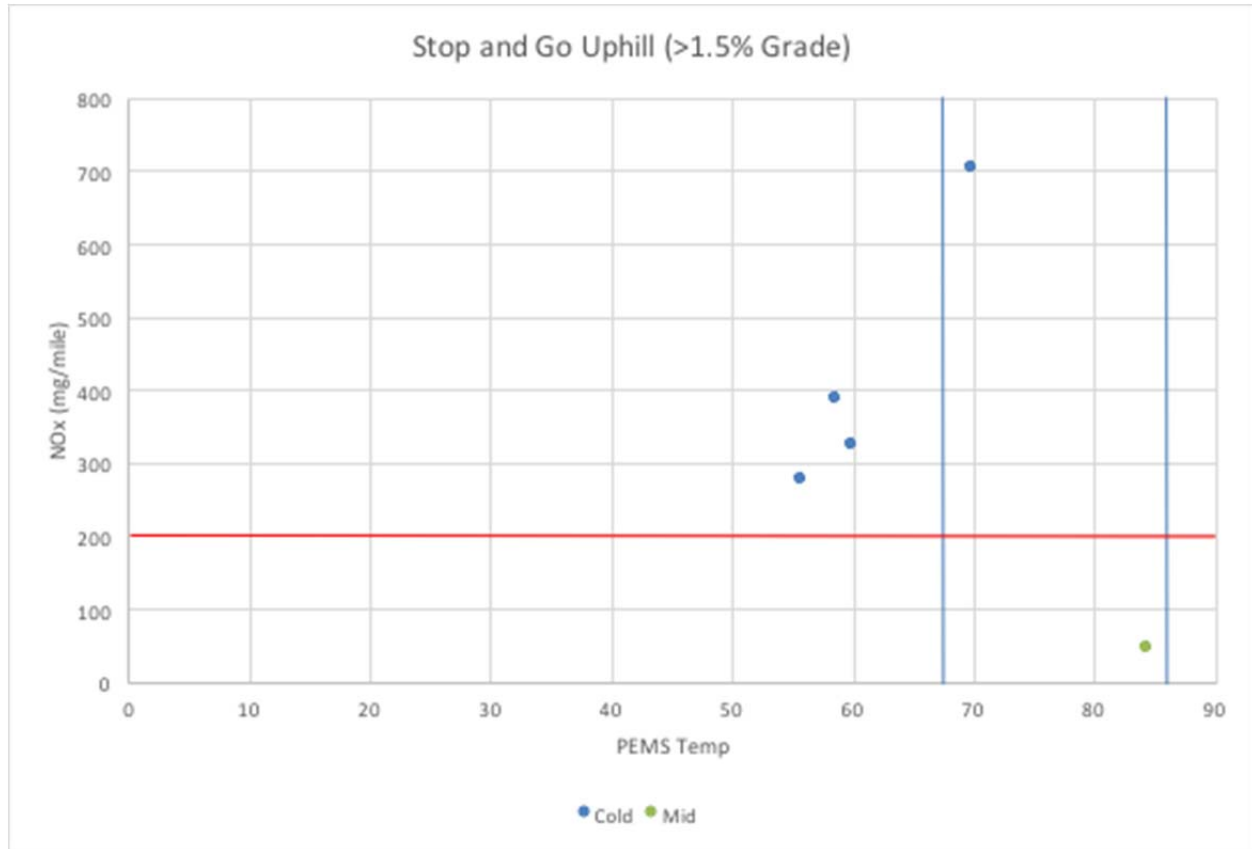
140. Hills are not part of the testing protocol for certification of new vehicles. However, it would be a material fact to a reasonable consumer to know that the GM vehicles were polluting during hill driving of levels above what a

reasonable consumer would expect to be produced by “Eco” vehicles. Testing shows that hills are challenging for GM’s “clean diesels.”

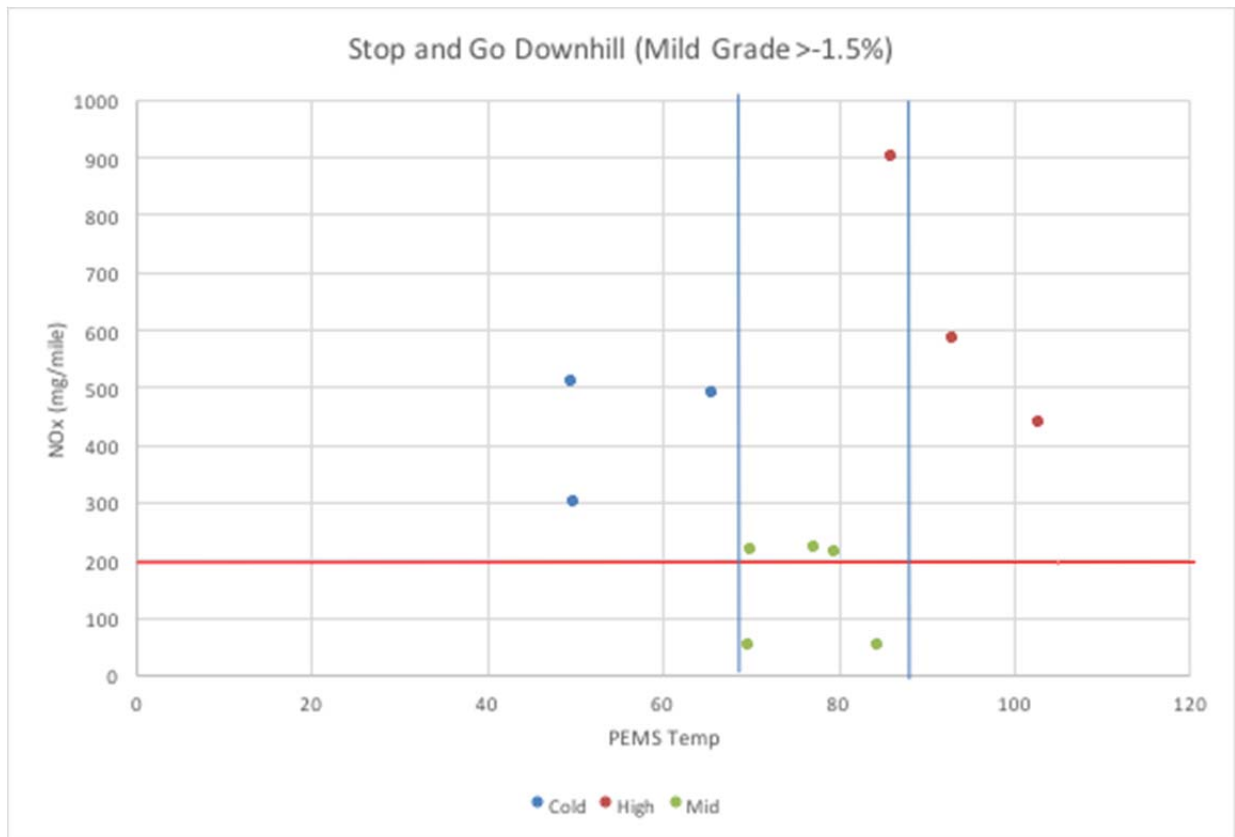
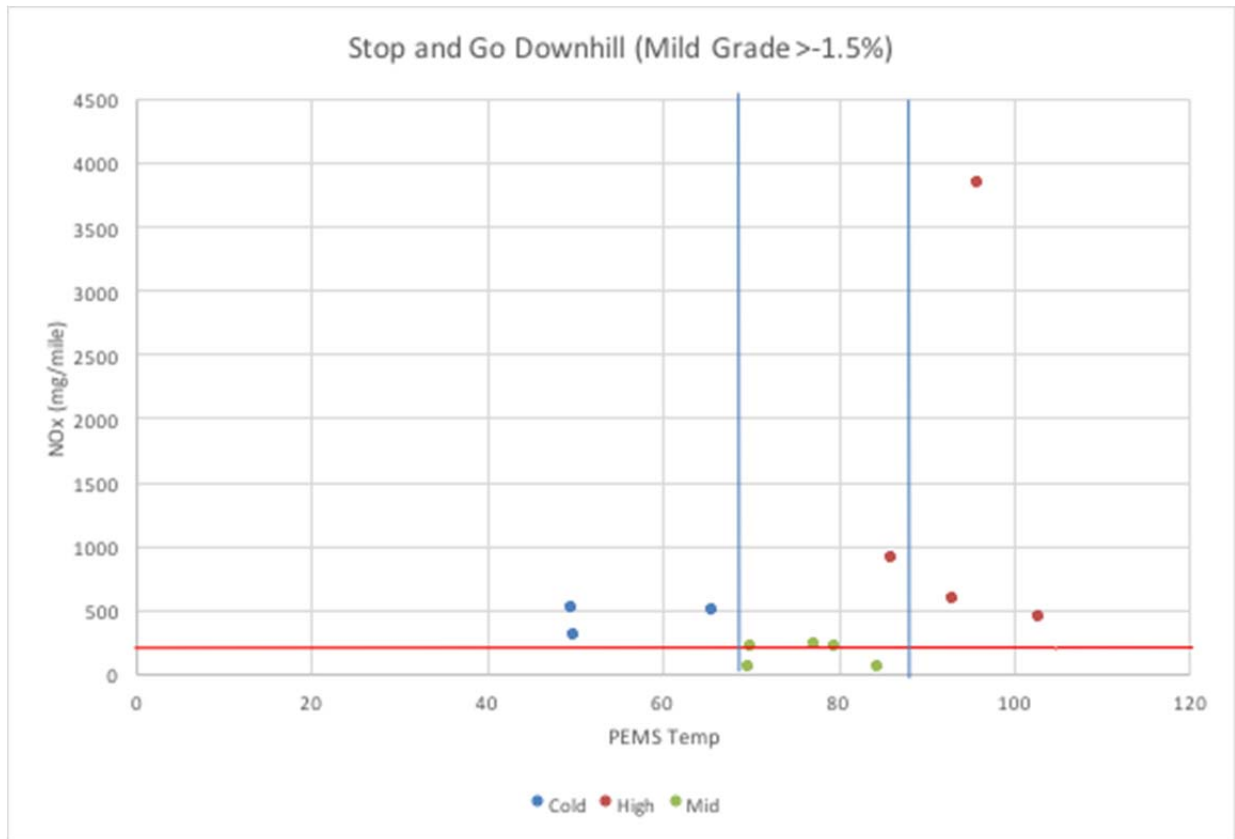
141. The testing done on the Silverado indicates that in stop and go conditions on a hill with a grade of less than 1.5 percent, average emissions are 300 mg/mile with some excursions reading as high as 715 mg/mile. Note that road grades below 1.5 percent would be considered quite mild and are often encountered in areas that would be described as “flat.” Again, there appears to be a significant increase in emissions at ambient temperatures below the certification test window.

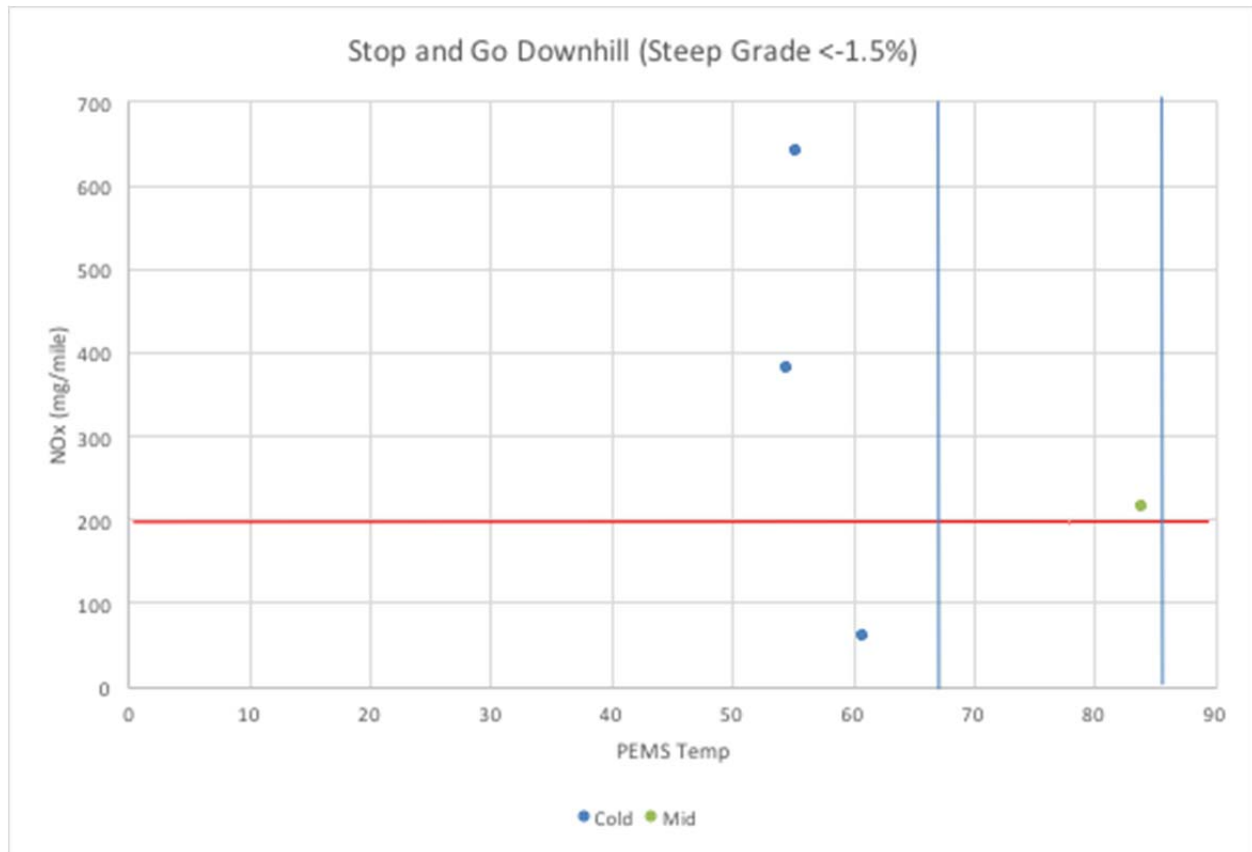


142. When operating on grades above 1.5 percent, average emissions were 350 mg/mile with excursions up to 704 mg/mile.

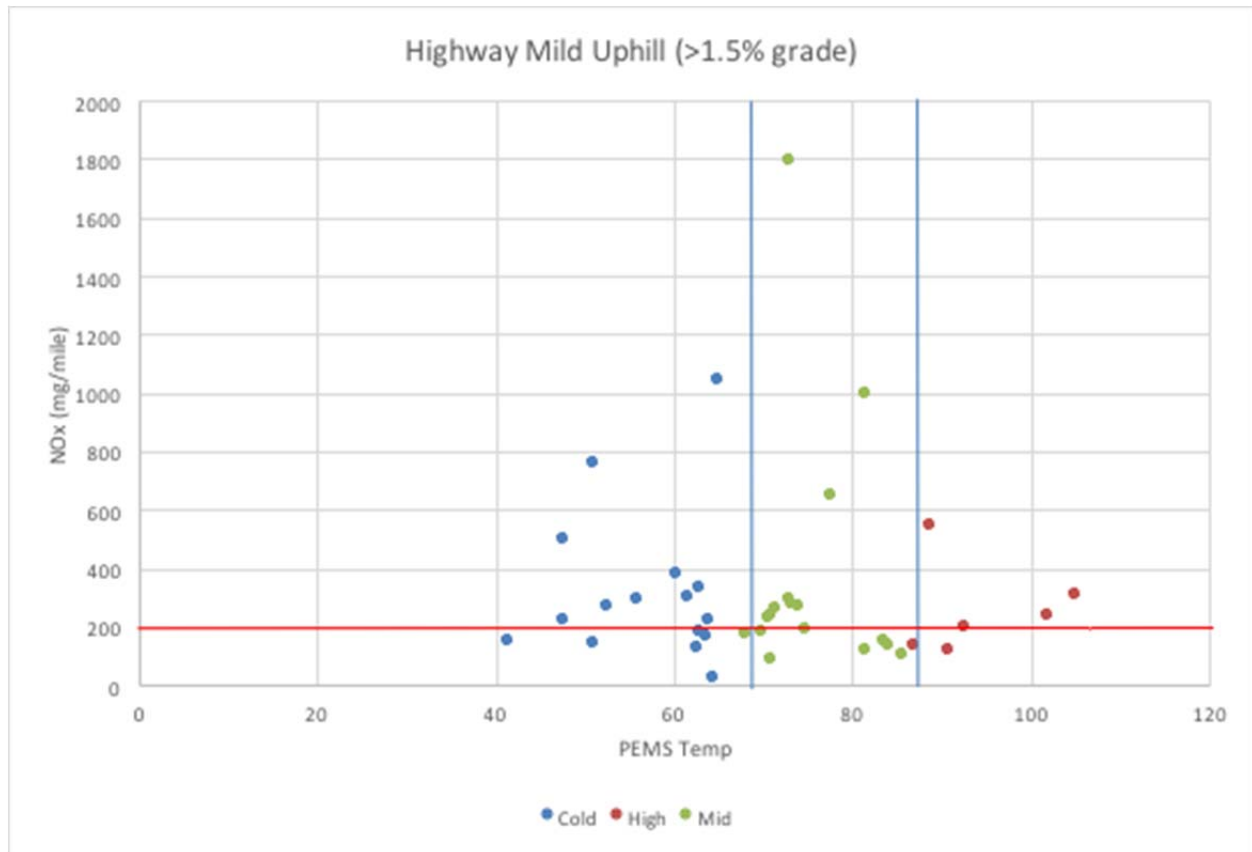


143. Some may assume that higher emissions uphill are offset by low emissions downhill when less power is needed. Not so. When testing on a downhill mild grade at temperatures below 68°F average, emissions are 425 mg/mile, which is higher than the same grades uphill. At temperatures above 86°F, average emissions are 760 mg/mile, with excursions up to 3,843 mg/mile. In the second plot, the 3,843 mg/mile data point is omitted so that data points closer to the standard can be easily viewed. Downhill grades steeper than 1.5% show similar results.

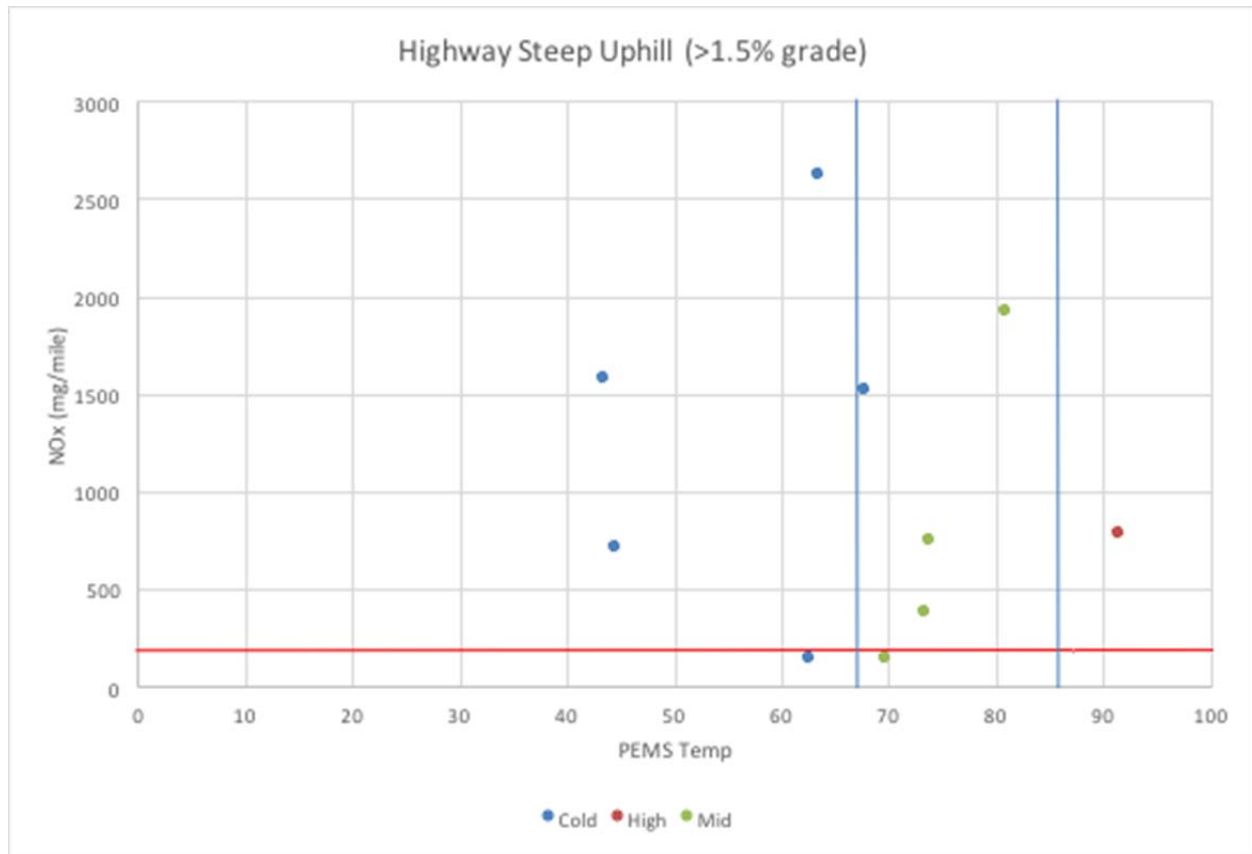




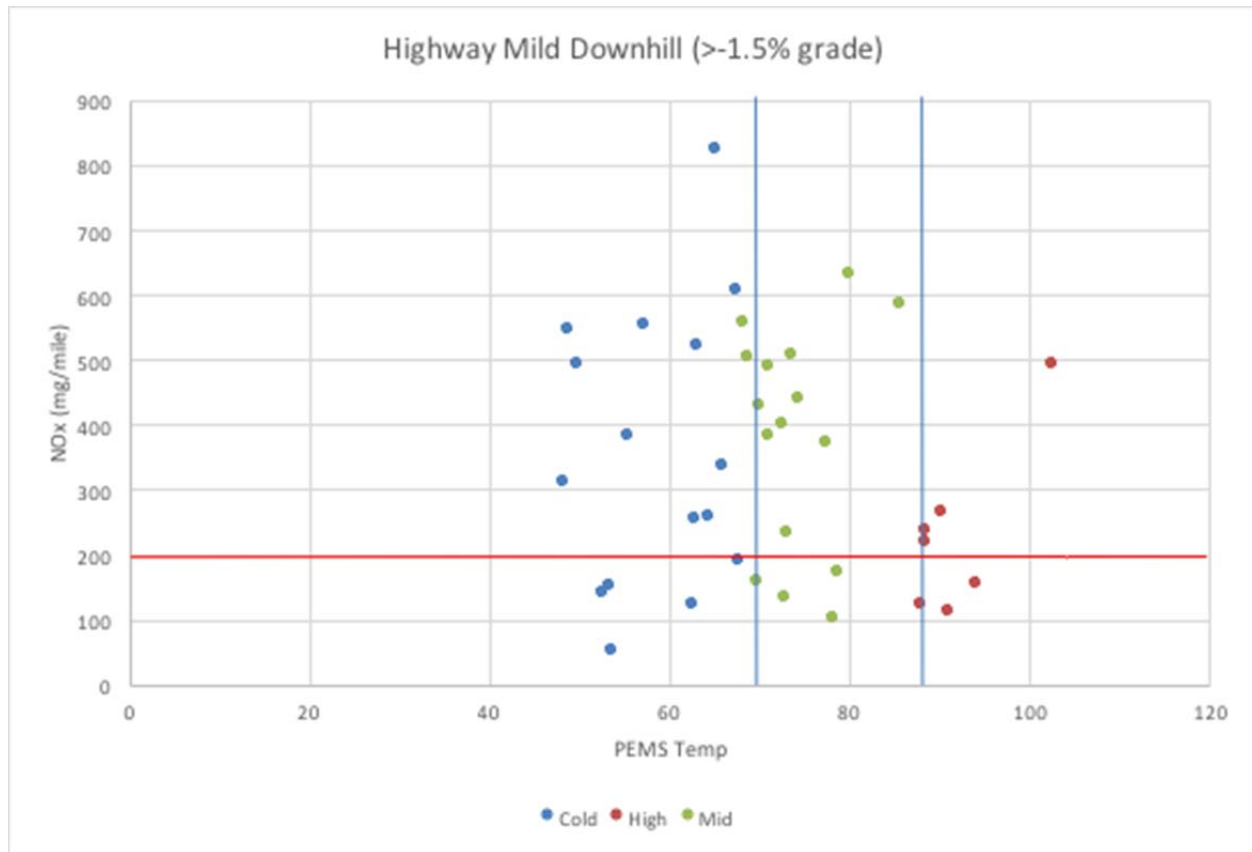
144. When tested using highway speeds on grades less than 1.5 percent, average emissions are 340, 322, and 308 mg/mile for cold, mild, and high temperatures, with excursions as high as 1,794 mg/mile. Although higher exhaust temperatures are generated under the slightly higher load generated while traveling uphill, which should result in better SCR performance, it appears the Silverado produces emissions well above the standard across all temperature ranges.



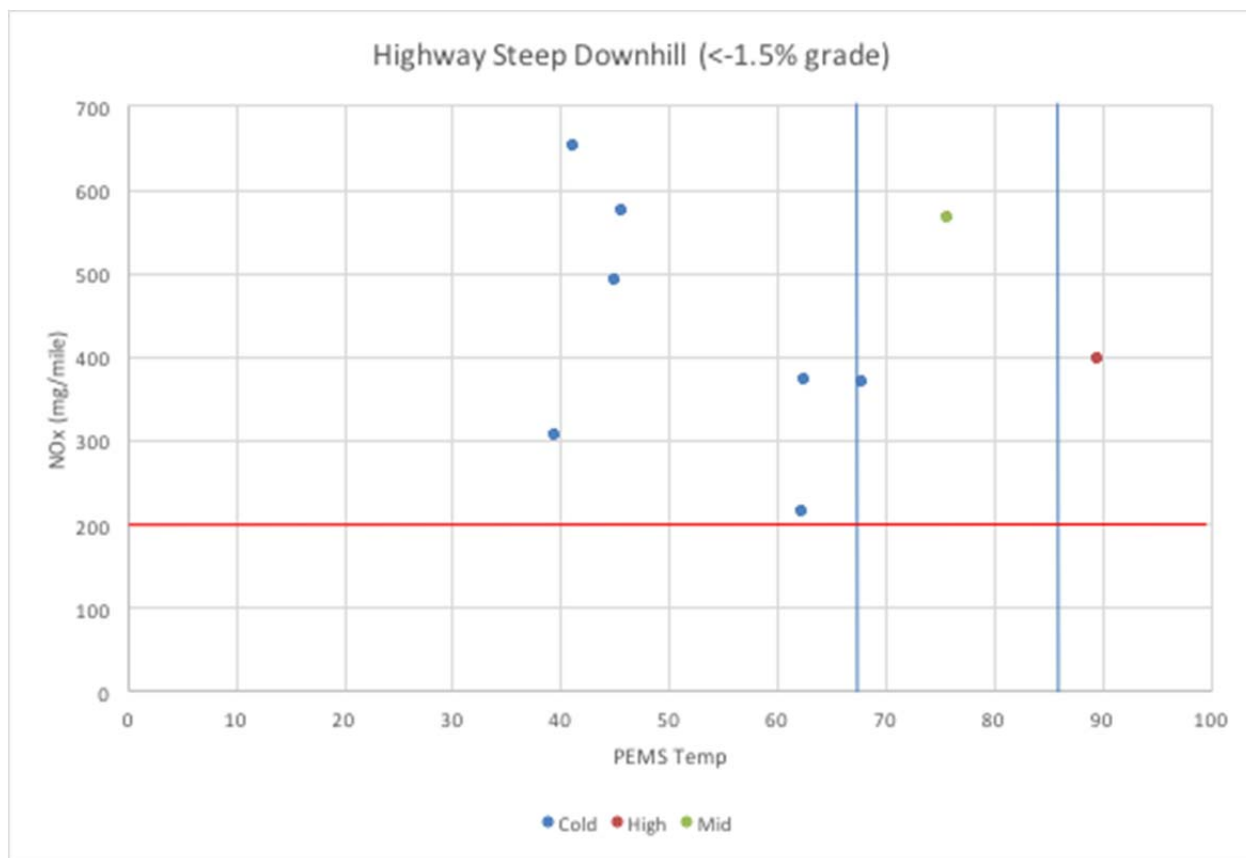
145. When tested using highway speeds on grades above 1.5 percent, EGR rates are reduced to maintain power and average emissions increase to 1,095 mg/mile, 833 mg/mile, and 783 mg/mile for cold, mild, and high temperatures. Road grades were tested ranged between 1.8% and 4.4%. These road grades produce NOx emissions far in excess of the standard. Excursions as high as 2,621 mg/mile were observed.



146. The same behavior is observed in mild downhill highway driving as observed with stop and go driving. These downhill emissions, which are generated under very low engine load, do not offset the extreme uphill NOx emissions. Although the vehicle is under significantly lower load than flat or uphill grades, NOx emissions are well above the standard with average emission rates of 420, 425, and 301 mg/mile for cold, mild, and high temperatures. Excursions as high as 826 mg/mile are observed, and most data points tested fall well above the standard.



147. Downhill grades steeper than 1.5% exhibit similar performance, though none of the data points tested fell below the standard. On average, emissions were 494, 565, and 398 mg/mile for cold, mild, and high temperatures. Excursions as high as 650 mg/mile are observed. In all cases, these emission rates are well in excess of the standard.



148. In general, contrary to what a reasonable consumer would expect, the Silverados and Sierras pollute at high levels going both uphill and downhill.

**5. The test vehicle is representative of all Sierra and Silverado vehicles.**

149. Plaintiffs allege that the following GM models are affected by the unlawful, unfair, deceptive, and otherwise defective emission controls: 2011-2016 Silverado 2500HD/3500HD trucks and Sierra 2500HD/3500HD trucks.

150. Plaintiffs did not test each model to derive plausible allegations that each Polluting Vehicle violates U.S. and CARB emissions standards and produces emissions beyond those a reasonable consumer would have expected when he or

she purchased their vehicles. Plaintiffs did not need to. As set forth in more detail below, all of the models share either identical or very similar engines and emissions systems, allowing Plaintiffs' experts to plausibly conclude that all Polluting Vehicles violate U.S. and CARB standards and the expectations of a reasonable consumer.

151. GM itself grouped the engine used for both the Silverado and Sierra into the same application and test group. CARB and EPA certified the engines in the test group which means, from an emissions standpoint, the engines are considered identical.

152. All variants of the Silverado and Sierra sold in the U.S. are well represented by both the Plaintiffs' list of vehicles and Plaintiffs' test vehicles since GM did not change the engine in any significant way between 2011 and 2016; all vehicles employ the same generation of Duramax engine.

153. Plaintiffs' experts also conducted additional research into the technical literature to understand the various configurations of Duramax engines sold between 2011 and 2016. The literature provides some insight into the architecture of the variants of the engines. In all cases, the engines are shown to have much more commonality than not, leading Plaintiffs' experts to conclude that there is a strong basis for sufficient similarity or "sameness" to warrant inclusion on the list of Polluting Vehicles. The vehicles are either equivalent from an

emissions standpoint to the test vehicles or use the same core technologies and engine platforms as the test vehicles.

**G. This Is Not the Only GM Model to Employ This Deception**

154. GM's deceptive emissions practice are also found in the GM Chevy Cruze, giving rise to the inference that its emissions manipulation strategy occurred here and is part of an overall diesel strategy employed by GM and facilitated by Bosch.

155. This is what GM promised for the Chevy Cruze:



156. Plaintiffs have tested the Cruze using a Portable Emissions Measurement System (PEMS). Testing revealed that the Cruze fails to meet U.S. emissions standards as promised. The U.S. standard on the HWFET test is 70 mg/mile. In steady highway driving at 60 mph, the Cruze averaged 128 mg/mile with a high of 557 mg/mile. In stop and go driving, the average was 182 mg/mile with a maximum of 689 mg/mile, or 3.6 to 13.8 times the federal standard. When

tested at temperatures below 50°F, the NO<sub>x</sub> was 689 mg/mile and it appears the emissions control system stops working. The same is true at temperatures over 85°F, where NO<sub>x</sub> rates were tested and ran at 450 to 550 mg/mile. The Cruze thus has a defeat device similar to the devices in the Silverado and Sierras.

## **H. The Bosch EDC17**

157. All modern engines are integrated with sophisticated computer components to manage the vehicle's operation, such as an electronic diesel control. Bosch GmbH tested, manufactured, and sold the EDC system used by Volkswagen, FCA, Mercedes, and GM. This system is more formally referred to as the Electronic Diesel Control Unit 17 ("EDC Unit 17" or "ED17"). Upon its introduction, EDC Unit 17 was publicly touted by Bosch as follows:<sup>26</sup>

EDC17 . . . controls every parameter that is important for effective, low-emission combustion.

Because the computing power and functional scope of the new EDC17 can be adapted to match particular requirements, it can be used very flexibly in any vehicle segment on all the world's markets. In addition to controlling the precise timing and quantity of injection, exhaust gas recirculation, and manifold pressure regulation, it also offers a large number of options such as the control of particulate filters or systems for reducing nitrogen oxides. The Bosch EDC17 determines the injection parameters for each cylinder, making specific adaptations if necessary. This improves the precision of injection throughout the vehicle's entire service life. The system therefore makes an important

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<sup>26</sup> See Exhibit 19, Bosch Press Release, *The brain of diesel injection: New Bosch EDC17 engine management system* (Feb. 28, 2006), <http://www.bosch-presse.de/presseforum/details.htm?txtID=2603&locale=en>.

contribution to observing future exhaust gas emission limits.

158. Bosch worked with each vehicle manufacturer that utilized EDC Unit 17 to create a unique set of specifications and software code to manage the vehicles' engine operation.

159. Bosch's EDC Unit 17 controls emissions by periodically reading sensor values, evaluating a control function, and controlling actuators based on the control signal.<sup>27</sup> Sensor readings include crankshaft position, air pressure, air temperature, air mass, fuel temperature, oil temperature, coolant temperature, vehicle speed, exhaust oxygen content, as well as driver inputs such as accelerator pedal position, brake pedal position, cruise control setting, and selected gear. Based on sensor input, EDC17 controls and influences the fuel combustion process including, in particular, fuel injection timing, which affects engine power, fuel consumption, and the composition of the exhaust gas.<sup>28</sup>

160. All Bosch ECUs, including the EDC17, run on complex, highly proprietary engine management software over which Bosch exerts near-total control. In fact, the software is typically locked to prevent customers, like GM, from making significant changes on their own. Accordingly, both the design and

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<sup>27</sup> Moritz Contag *et al.*, How They Did It: An Analysis of Emission Defeat Devices in Modern Automobiles, p.4 (2017).

<sup>28</sup> *Id.*

implementation are interactive processes, requiring Bosch's close collaboration with the automaker from beginning to end.

161. With respect to the Polluting Vehicles, the EDC 17 was used surreptitiously to evade emissions regulations. Bosch and GM worked together to develop and implement a specific set of software algorithms for implementation in the Polluting Vehicles, including algorithms to adjust fuel levels, exhaust gas recirculation, air pressure levels, and urea injection rates in vehicles equipped with SCR systems.

162. Bosch and GM worked together to develop and implement a specific set of software algorithms for implementation in the Polluting Vehicles, which enabled GM to adjust fuel levels, exhaust gas recirculation, air pressure levels, and even urea injection rates (for applicable vehicles).<sup>29</sup> When carmakers test their vehicles against EPA emission standards, they place their cars on dynamometers (large rollers) and then perform a series of specific maneuvers prescribed by federal regulations. Bosch's EDC Unit 17 gave Volkswagen, GM, and other manufacturers the power to detect test scenarios by monitoring vehicle speed, acceleration, engine operation, air pressure, and even the position of the steering wheel. When the EDC Unit 17's detection algorithm detected that the vehicle was

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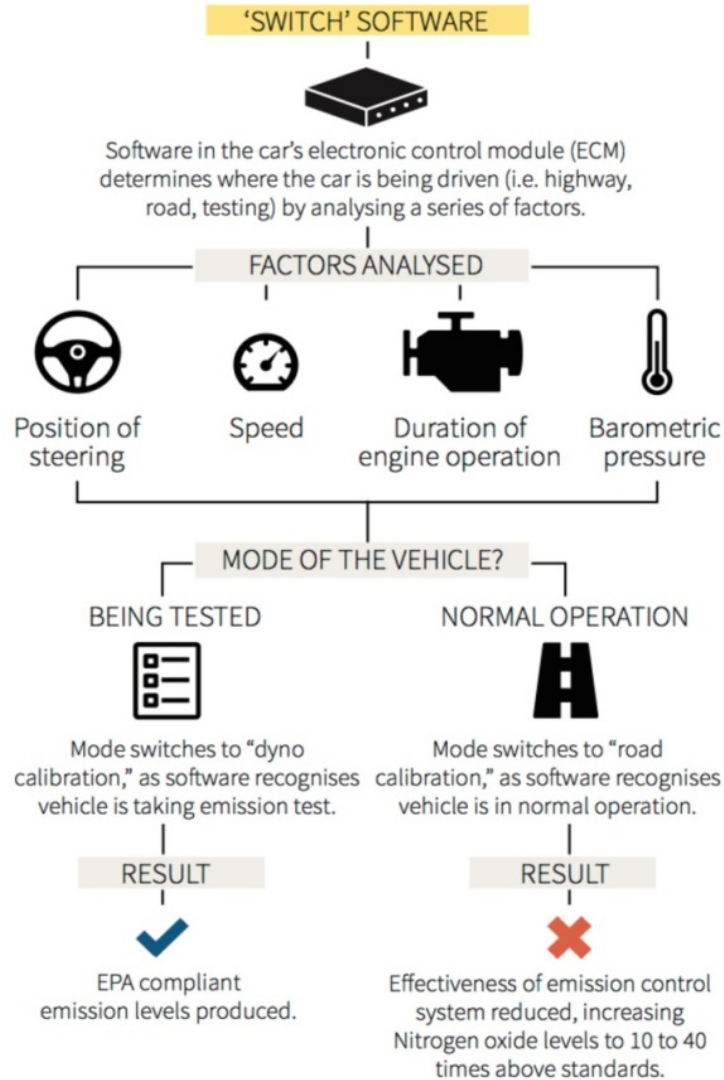
<sup>29</sup> See, e.g., Exhibit 20, *Engine management*, Bosch Auto Parts, [http://de.bosch-automotive.com/en/parts\\_and\\_accessories/motor\\_and\\_sytems/diesel/engine\\_management\\_2/engine\\_control\\_unit\\_1](http://de.bosch-automotive.com/en/parts_and_accessories/motor_and_sytems/diesel/engine_management_2/engine_control_unit_1) (last accessed May 24, 2017).

on a dynamometer (and undergoing an emission test), additional software code within the EDC Unit 17 downgraded the engine's power and performance and upgraded the emissions control systems' performance by switching to a "dyno calibration" to cause a subsequent reduction in emissions to legal levels. Once the EDC Unit 17 detected that the emission test was complete, the EDC Unit would then enable a different "road calibration" that caused the engine to return to full power while reducing the emissions control systems' performance, and consequently caused the vehicle to spew the full amount of illegal NOx emissions out on the road.<sup>30</sup> This process is illustrated in the following diagram, applicable to GM as well:

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<sup>30</sup> Exhibit 21, Russell Hotten, *Volkswagen: The scandal explained*, BBC (Dec. 10, 2015), <http://www.bbc.com/news/business-34324772>.

## How Volkswagen's defeat device works



Source: U.S. Environmental Protection Agency

J. Wang, 22/09/2015

REUTERS

163. This workaround was illegal. The Clean Air Act expressly prohibits defeat devices, defined as any auxiliary emission control device “that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use.”

40 C.F.R. § 86.1803-01; *see also id.* § 86.1809-10 (“No new light-duty vehicle, light-duty truck, medium-duty passenger vehicle, or complete heavy-duty vehicle shall be equipped with a defeat device.”). Moreover, the Clean Air Act prohibits the sale of components used as defeat devices “where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.” 42 U.S.C. § 7522(a)(3). Finally, in order to obtain a certificate of compliance (COC), automakers must submit an application that lists all auxiliary emission control devices installed in the vehicle, a justification for each, and an explanation of why the control device is not a defeat device.

164. Thus, in order to obtain the COCs necessary to sell their vehicles, GM did not disclose, and affirmatively concealed from government regulators, the presence of the test-detecting and performance-altering software code that it developed with Bosch, thus making that software an illegal defeat device. In other words, GM, working closely with Bosch, lied to the government, its customers, its dealers, and the public at large.

165. Because the COCs were fraudulently obtained, and because the Polluting Vehicles did not conform “in all material respects” to the specifications provided in the COC applications, the Polluting Vehicles were never covered by a valid COC, and thus were never legal for sale, nor were they EPA- and/or CARB-compliant as represented. GM and Bosch hid these facts from the EPA, CARB and

other regulators, its dealers, and consumers, and it continued to sell and lease the Polluting Vehicles to the driving public despite their illegality and with the complicity of Bosch.

166. GM's illegal workaround was enabled by its close partnership with Bosch, which enjoyed a sizable portion of its annual revenue from manufacturing parts used in GM's and other manufacturers' diesel vehicles.<sup>31</sup> Bosch was well aware that GM was using its emissions control components as a defeat device and, in fact, worked with GM to develop the software algorithm specifically tailored for the Polluting Vehicles.

167. Because the COCs were fraudulently obtained, the Polluting Vehicles were never covered by valid COCs and thus were never offered legally for sale. GM hid these facts from the EPA, CARB and other state regulators, and consumers, and it continued to sell and lease the Polluting Vehicles despite their illegality and with the complicity of Bosch.

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<sup>31</sup> Approximately 50,000 of Bosch's 375,000 employees worked in the diesel technology operations branch of Bosch, and Volkswagen was the biggest diesel manufacturer in the world. *See Exhibit 22, Bosch probes whether its staff helped VW's emissions rigging*, Automotive News (Jan. 27, 2016), <http://www.autonews.com/article/20160127/COPY01/301279955/bosch-probes-whether-its-staff-helped-vws-emissions-rigging>.

**I. Bosch Played a Critical Role in the Defeat Device Scheme in Many Diesel Vehicles in the U.S., Giving Rise to a Strong Inference That Bosch Played a Key Role in Implementing the GM Emission Strategy**

168. Although this case is not about Volkswagen, Bosch's history with Volkswagen provides background and support for its participation in the RICO enterprise alleged herein, of which Bosch and GM were participants. On information and belief, Plaintiffs allege that the same level of coordination between Bosch and Volkswagen also occurred between Bosch and GM.

**1. Volkswagen and Bosch conspire to develop the illegal defeat device.**

169. Bosch tightly controlled development of the control units in the Polluting Vehicles and actively participated in the development of the defeat device.

170. As discussed above, Bosch introduced a new generation of diesel ECUs for Volkswagen.

171. A February 28, 2006 Bosch press release introduced the "New Bosch EDC17 engine management system" as the "brain of diesel injection" which "controls every parameter that is important for effective, low-emission combustion." The EDC17 offered "[e]ffective control of combustion" and a

“[c]oncept tailored for all vehicle classes and markets.” In the press release, Bosch touted the EDC17 as follows:<sup>32</sup>

**EDC17: Ready for future demands**

Because the computing power and functional scope of the new EDC17 can be adapted to match particular requirements, it can be used very flexibly in any vehicle segment on all the world's markets. In addition to controlling the precise timing and quantity of injection, exhaust gas recirculation, and manifold pressure regulation, it also offers a large number of options such as the control of particulate filters or systems for reducing nitrogen oxides. The Bosch EDC17 determines the injection parameters for each cylinder, making specific adaptations if necessary. This improves the precision of injection throughout the vehicle's entire service life. The system therefore makes an important contribution to observing future exhaust gas emission limits.

172. Bosch and Volkswagen worked together closely to modify the software and to create specifications for each Volkswagen vehicle model. Indeed, customizing a road-ready ECU is an intensive three- to five-year endeavor involving a full-time Bosch presence at an automaker's facility. Such was the case with GM as well.

173. All Bosch ECUs, including the EDC17, run on complex, highly proprietary engine management software over which Bosch exerts nearly total control. In fact, the software is typically locked to prevent customers, like Volkswagen and GM, from making significant changes on their own.

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<sup>32</sup> See Exhibit 19, Bosch press release, *The brain of diesel injection: New Bosch EDC17 engine management system* (Feb. 28, 2006), <http://www.bosch-presse.de/presseforum/details.htm?txtID=2603&locale=en>.

174. Bosch's security measures further confirm that its customers cannot make significant changes to Bosch software without Bosch involvement. Bosch boasts that its security modules protect vehicle systems against unauthorized access in every operating phase, meaning that no alteration could have been made without either a breach of that security—and no such claims have been advanced—or Bosch's knowing participation.<sup>33</sup>

175. Unsurprisingly, then, at least one car company engineer has confirmed that Bosch maintains absolute control over its software as part of its regular business practices:<sup>34</sup>

I've had many arguments with Bosch, and they certainly own the dataset software and let their customers tune the curves. Before each dataset is released it goes back to Bosch for its own validation.

Bosch is involved in all the development we ever do. They insist on being present at all our physical tests and they log all their own data, so someone somewhere at Bosch will have known what was going on.

All software routines have to go through the software verification of Bosch, and they have hundreds of milestones of verification, that's the structure . . . .

The car company is *never* entitled by Bosch to do something on their own.

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<sup>33</sup> Exhibit 23, *Reliable Protection for ECUs*, ESCRYPT (May 12, 2016), <https://www.escrypt.com/en/news-events/protection-for-ecus>.

<sup>34</sup> Exhibit 24, Michael Taylor, *EPA Investigating Bosch over VW Diesel Cheater Software*, Car and Driver (Nov. 23, 2015), <http://blog.caranddriver.com/epa-investigating-bosch-over-vw-diesel-cheater-software/>.

176. Thus, Bosch GmbH and Bosch LLC cannot convincingly argue that the development of the Volkswagen defeat device was the work of a small group of rogue engineers.

177. In fact, Volkswagen's and Bosch's work on the EDC17 reflected a highly unusual degree of coordination. It was a massive project that required the work of numerous Bosch coders for a period of more than ten years, or perhaps more.<sup>35</sup> Although Bosch publicly introduced the EDC17 in 2006, it had started to develop the engine management system years before.<sup>36</sup>

178. In fact, Bosch was in on the secret and knew that Volkswagen was using Bosch's software algorithm as an "on/off" switch for emission controls when the vehicles were undergoing testing. As noted above, it has been said the decision to cheat was an "open secret" at Volkswagen.<sup>37</sup> It was an "open secret" at Bosch as well.

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<sup>35</sup> Approximately 50,000 of Bosch's 375,000 employees worked in the diesel technology operations branch of Bosch, and Volkswagen was the biggest diesel manufacturer in the world. See Exhibit 22, *Bosch Probes Whether Its Staff Helped VW's Emissions Rigging*, Automotive News (Jan. 27, 2016), <http://www.autonews.com/article/20160127/COPY01/301279955/bosch-probes-whether-its-staff-helped-vws-emissions-rigging>.

<sup>36</sup> Exhibit 19, Bosch press release, *The brain of diesel injection: New Bosch EDC17 engine management system* (Feb. 28, 2006), <http://www.bosch-presse.de/presseforum/details.htm?txtID=2603&locale=en>.

<sup>37</sup> Exhibit 25, Georgina Prodham, *Volkswagen probe finds manipulation was open secret in department*, Reuters (Jan. 23, 2016), <http://www.reuters.com/article/us-volkswagen-emissions-investigation-idUSKCN0V02E7>. See also Exhibit 26, Jay Ramey, *VW chairman Poetsch: Company 'tolerated breaches of rules'*, Autoweek (Dec. 10, 2015), <http://autoweek.com/article/vw-diesel-scandal/vw->

179. Volkswagen and Bosch personnel employed code language for the defeat device, referring to it as the “acoustic function” (in German, “akustikfunktion”). As described above, the roots of the “akustikfunktion”—and likely the cheating—can be traced back to the late 1990s when Audi devised software called the “akustikfunktion” that could switch off certain functions when the vehicle was in a test mode.<sup>38</sup> The “akustik” term is derived from the function’s ability to modify the noise and vibration produced by the engine. News articles report that, in 2006, Volkswagen further developed this “akustikfunktion” for the affected vehicles.<sup>39</sup>

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[chairman-poetsch-company-tolerated-breaches-rules](#) (it was necessary for the “EA 189 engine to pass U.S. diesel emissions limits within the budget and time frame allotted”).

<sup>38</sup> Exhibit 27, Martin Murphy, *Dieselgate’s Roots Stretch Back to Audi*, Handelsblatt Global (Apr. 19, 2016), <https://global.handelsblatt.com/edition/413/ressort/companies-markets/article/dieselgates-roots-stretch-back-to-audi?ref=MTI5ODU1>.

<sup>39</sup> Exhibit 25, Georgina Prodham, *Volkswagen probe finds manipulation was open secret in department*, Reuters (Jan. 23, 2016), <http://www.reuters.com/article/us-volkswagen-emissions-investigation-idUSKCN0V02E7>. Volkswagen Group Chairman Hans Dieter Poetsch explained that a small group of engineers and managers was involved in the creation of the manipulating software. See Exhibit 26, Jay Ramey, *VW chairman Poetsch: Company ‘tolerated breaches of rules’*, Autoweek (Dec. 10, 2015), <http://autoweek.com/article/vw-diesel-scandal/vw-chairman-poetsch-company-tolerated-breaches-rules>. See also Exhibit 21, Russell Hotten, *Volkswagen: The scandal explained*, BBC (Dec. 10, 2015), <http://www.bbc.com/news/business-34324772>; Exhibit 28, Matt Burt, *VW emissions scandal: how Volkswagen’s ‘defeat device’ works*, Autocar (Sept. 23, 2015), <http://www.autocar.co.uk/car-news/industry/vw-emissions-scandal-how-volkswagens-defeat-device-works>.

180. In sum, Bosch GmbH worked hand-in-glove with Volkswagen to develop and maintain the akustikfunktion/defeat device. On information and belief, it did so with GM as well.

**2. Volkswagen and Bosch conspire to conceal the illegal “akustikfunktion.”**

181. By 2007, and likely earlier, Bosch GmbH was critical not only in developing the “akustikfunktion” but also in concealing it.

182. Bosch GmbH was concerned about getting caught participating in the defeat device fraud. As reported in a German newspaper, *Bild am Sonntag*, and a French publication, a Volkswagen internal inquiry found that in 2007, Bosch GmbH warned Volkswagen by letter that using the emissions-altering software in production vehicles would constitute an “offense.”<sup>40</sup>

**3. Volkswagen and Bosch conspire in the U.S. and Germany to elude U.S. regulators who regulated not just Volkswagen diesels but all diesels.**

183. The purpose of the defeat device was to evade stringent U.S. emissions standards. Once Bosch GmbH, Bosch LLC, and Volkswagen perfected the defeat device, therefore, their attention turned to deceiving U.S. regulators not

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<sup>40</sup> Exhibit 29, *Bosch warned VW about illegal software use in diesel cars, report says*, Automotive News (Sept. 27, 2015), <http://www.autonews.com/article/20150927/COPY01/309279989/bosch-warned-vw-about-illegal-software-use-in-diesel-cars-report-says>; Exhibit 30, *VW Scandal: Company Warned over Test Cheating Years Ago*, BBC (Sept. 27, 2015), <http://www.bbc.com/news/business-34373637>.

just for the benefit of Volkswagen but also for the benefit of GM, Mercedes, and FCA.

184. Bosch's North American subsidiary, defendant Robert Bosch LLC, was also part of and essential to the fraud. Bosch LLC worked closely with Bosch GmbH and Volkswagen in the United States and in Germany to ensure that the non-compliant affected vehicles passed U.S. emissions tests. Bosch LLC employees frequently communicated with U.S. regulators and actively worked to ensure the affected vehicles were approved by regulators.

185. Employees of Bosch LLC, Bosch GmbH, and IAV provided specific information to U.S. regulators about how Volkswagen's vehicles functioned and unambiguously stated that the vehicles met emissions standards. Bosch LLC regularly communicated to its colleagues and clients in Germany about ways to deflect and diffuse questions from U.S. regulators about the affected vehicles—particularly CARB.

**4. Bosch keeps Volkswagen's secret safe and pushes "clean" diesel in the U.S. as a concept applicable to all diesel car manufacturers.**

186. Bosch not only kept Volkswagen's dirty secret safe, it went a step further and actively lobbied lawmakers to push "clean diesel" in the U.S., including making affected vehicles available for regulators to drive.

187. As early as 2004, Bosch announced a push to convince U.S. automakers that its diesel technology could meet tougher 2007 U.S. emission

standards.<sup>41</sup> Its efforts ended up being a multi-year, multi-million dollar effort involving key players from both Robert Bosch GmbH in Germany and Bosch LLC in the U.S.

188. Bosch's promotion of diesel technology specifically targeted the U.S. For example, Bosch put on "California Diesel Days"<sup>42</sup> and "SAE World Congress in Detroit."<sup>43</sup> In 2008, Bosch LLC and Volkswagen America co-sponsored the "Future Motion Made in Germany-Second Symposium on Modern Drive Technologies" at the German Embassy in Washington, D.C., with the aim of providing a venue for "stakeholders to gain insight into the latest technology trends and engage in a vital dialogue with industry leaders and policymakers."<sup>44</sup>

189. Bosch LLC hosted multi-day conferences open to many regulators and legislators and held private meetings with regulators in which it proclaimed extensive knowledge of the specifics of Volkswagen technology, including

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<sup>41</sup> Exhibit 31, Edmund Chew, *Bosch boosts US diesel lobbying*, Autonews (Mar. 8, 2004), <http://www.autonews.com/article/20040308/SUB/403080876/bosch-boosts-us-diesel-lobbying>.

<sup>42</sup> Exhibit 32, *Bosch drives clean diesel in California*, Bosch, [http://www.bosch.us/content/language1/html/734\\_4066.htm?section=28799C0E86C147799E02226E942307F2](http://www.bosch.us/content/language1/html/734_4066.htm?section=28799C0E86C147799E02226E942307F2) (last accessed May 24, 2017).

<sup>43</sup> See, e.g., Exhibit 33, *Bosch Brings Innovation, Green Technology to SAE 2009 World Congress*, Bosch, [http://www.bosch.us/content/language1/html/734\\_7432.htm?section=CDAF31A468D9483198ED8577060384B3](http://www.bosch.us/content/language1/html/734_7432.htm?section=CDAF31A468D9483198ED8577060384B3) (last accessed May 24, 2017).

<sup>44</sup> Exhibit 34, *Bosch: Clean Diesel is Key Part of Future Technology Mix*, Bosch, <http://us.bosch-press.com/tbwebdb/bosch-usa/en-US/PressText.cfm?CFID=60452038&CFTOKEN=9c778a2564be2c9b-56CC21B6-96AB-5F79-32445B13EC121DBE&nh=00&Search=0&id=364> (last accessed May 24, 2017).

calibrations necessary for the affected vehicles to comply with emissions regulations.

190. In April 2009, Bosch LLC organized and hosted a two-day “California Diesel Days” event in Sacramento, California. Bosch invited a roster of lawmakers, journalists, executives, regulators, and NGOs<sup>45</sup> with the aim of changing perceptions of diesel from “dirty” to “clean.” The event featured affected vehicles as ambassadors of “clean diesel” technology, including a 2009 Volkswagen Jetta “green car.” The stated goals were to “build support for light-duty diesel as a viable solution for achieving California’s petroleum and emission reduction objectives.”

191. In 2009, Bosch also became a founding member of the U.S. Coalition for Advanced Diesel Cars.<sup>46</sup> One of this advocacy group’s purposes included “promoting the energy efficiency and environmental benefits of advanced clean diesel technology for passenger vehicles in the U.S. marketplace.”<sup>47</sup> This group

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<sup>45</sup> Exhibit 32, *Bosch drives clean diesel in California*, Bosch, [http://www.bosch.us/content/language1/html/734\\_4066.htm?section=28799C0E86C147799E02226E942307F2](http://www.bosch.us/content/language1/html/734_4066.htm?section=28799C0E86C147799E02226E942307F2) (last accessed May 24, 2017); *see also* Exhibit 35, *California Diesel Days*, The U.S. Coalition for Advanced Diesel Cars, <http://www.californiadieseldays.com/> (last accessed May 24, 2017).

<sup>46</sup> Exhibit 36, Chrissie Thompson, *New Coalition Aims To Promote Diesel Cars*, *Automotive News* (Feb. 2, 2009), <http://www.autonews.com/article/20090202/OEM06/302029728/new-coalition-aims-to-promote-diesel-cars>.

<sup>47</sup> Exhibit 37, *About the Coalition*, The U.S. Coalition for Advanced Diesel Cars, <http://cleandieseldelivers.com/about/> (last accessed May 24, 2017).

lobbies Congress, U.S. regulators, and the California Air Resources Board in connection with rules affecting “clean diesel” technology.<sup>48</sup>

192. In 2010, Bosch sponsored the Virginia International Raceway with the support of the 2010 Volkswagen Jetta TDI Cup Series. This event included TDI vehicles featuring Bosch technology.<sup>49</sup>

193. In 2012, Audi, BMW, Bosch, Daimler, Porsche, and Volkswagen joined to form The Clearly Better Diesel initiative.<sup>50</sup> The initiative was announced in Berlin by the German Association of the Automotive Industry. Its stated goal was to promote the sale of clean diesel vehicles in the U.S. The initiative’s slogan was “Clean Diesel. Clearly Better.”

194. In its efforts to promote “clean diesel,” including the affected vehicles, Bosch GmbH acted on behalf of its global group.

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<sup>48</sup> *Id.* See also, e.g., Exhibit 38, Letter to Chairman Mary Nichols and CARB concerning a statement made about diesel technology (Jan. 8, 2016), available at <http://cleandieseldelivers.com/media/Mary-Nichols-Letter-01082016.pdf>.

<sup>49</sup> Exhibit 39, *Volkswagen Jetta TDI Cup Drivers Take to the Track for the First Time in 2010 at VIR*, Volkswagen of America, Inc. (April 23, 2010), available at <http://www.prnewswire.com/news-releases/volkswagen-jetta-tdi-cup-drivers-take-to-the-track-for-the-first-time-in-2010-at-vir-91985604.html>.

<sup>50</sup> Exhibit 40, “*Clean Diesel Clearly Better*” Campaign for Clean Diesel Cars Welcomed, Diesel Technology Forum (Dec. 12, 2012), available at <http://www.prnewswire.com/news-releases/clean-diesel-clearly-better-campaign-for-clean-diesel-cars-welcomed-183261432.html>.

**5. Bosch also made the EDC17 found in FCA vehicles that pollute excessively.**

195. To appeal to environmentally conscious consumers, FCA *vigorously* markets its “EcoDiesel” vehicles as “clean diesel” with ultra-low emissions, high fuel economy, and powerful torque and towing capacity. FCA calls its EcoDiesel “ultra clean,” “emissions compliant,” and claims that “*no NOx*” exits the tailpipe. FCA charges a premium for EcoDiesel-equipped vehicles. For example, selecting the 3.0-liter EcoDiesel engine for the 2016 Dodge Ram 1500 Laramie adds \$4,770 to the purchase price. And the 2016 Jeep Grand Cherokee Overland EcoDiesel costs \$4,500 more than its gasoline counterpart.

196. These representations are deceptive and false. FCA programmed its EcoDiesel vehicles to significantly reduce the effectiveness of the NOx reduction systems during real-world driving conditions. The EPA has determined that the affected vehicles contain defeat devices. After a lawsuit had already been filed by Plaintiffs’ counsel in this case, on January 12, 2017, the EPA issued a Notice of Violation against FCA because FCA “failed to disclose Auxiliary Emission Control Devices (AECDs)” in the affected vehicles.<sup>51</sup> The EPA identified eight specific devices that cause the vehicle to perform effectively when being tested for

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<sup>51</sup> Exhibit 41, EPA’s January 12, 2017 Notice of Violation to FCA, available at <https://www.epa.gov/sites/production/files/2017-01/documents/fca-caa-nov-2017-01-12.pdf>.

compliance and then reduce the effectiveness of the emissions control system during normal operation and use.

197. “Once again,” said CARB Chair Mary D. Nichols about FCA’s cheating, “a major automaker made the business decision to skirt the rules and got caught.”<sup>52</sup>

198. The same experts that tested the Silverado’s performance did on-road testing of the FCA vehicles and confirmed that FCA’s so-called EcoDiesel cars produced NOx emissions at an average of 222 mg/mile in city driving (four times the FTP standard of 50 mg/mile) and 353 mg/mile in highway driving (five times higher than the U.S. highway standard of 70 mg/mile). In many instances, NOx values were in excess of 1,600 mg/mile, more than 20 times the standards. This testing occurred before the EPA announcement.

199. Bosch made the EDC17 for the polluting FCA vehicles.

**6. Bosch GmbH also made the EDC17 found in polluting Mercedes diesels.**

200. Plaintiffs’ experts in this case tested the Mercedes diesel vehicles and made the first public disclosure of Mercedes’ unlawful conduct through certain of the counsel in this case in a civil suit filed in the District of New Jersey. Reportedly as a result of that lawsuit, Mercedes is under investigation by DOJ and German

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<sup>52</sup> Exhibit 42, EPA News Release, *EPA Notifies Fiat Chrysler of Clean Air Act Violations* (Jan.12, 2017), available at <https://www.epa.gov/newsreleases/epa-notifies-fiat-chrysler-clean-air-act-violations>.

authorities with respect to its BlueTEC diesel vehicles. Over 14 Mercedes diesel models are alleged to produce emissions 8.1 to 19.7 times relevant standards.

Bosch GmbH supplied the EDC17 in the polluting Mercedes vehicles.

## **J. The Damage from Excessive NO<sub>x</sub>**

201. NO<sub>x</sub> contributes to ground-level ozone and fine particulate matter. According to the EPA, “Exposure to these pollutants has been linked with a range of serious health effects, including increased asthma attacks and other respiratory illnesses that can be serious enough to send people to the hospital. Exposure to ozone and particulate matter have also been associated with premature death due to respiratory-related or cardiovascular-related effects. Children, the elderly, and people with pre-existing respiratory disease are particularly at risk for health effects of these pollutants.”

202. The EPA describes the danger of NO<sub>x</sub> as follows:

**Acid Rain** - NO<sub>x</sub> and sulfur dioxide react with other substances in the air to form acids which fall to earth as rain, fog, snow, or dry particles. Some may be carried by the wind for hundreds of miles. Acid rain damages forests; causes deterioration of cars, buildings, and historical monuments; and causes lakes and streams to become acidic and unsuitable for many fish.



#### **Water Quality Deterioration**

- Increased nitrogen loading in water bodies, particularly coastal estuaries, upsets the chemical balance of nutrients used by aquatic plants and animals. Additional nitrogen accelerates "eutrophication," which leads to oxygen depletion and reduces fish and shellfish populations.  $\text{NO}_x$  emissions in the air are one of the largest sources of nitrogen pollution to the Chesapeake Bay.



**Toxic Chemicals** - In the air,  $\text{NO}_x$  reacts readily with common organic chemicals, and even ozone, to form a wide variety of toxic products, some of which may cause biological mutations. Examples of these chemicals include the nitrate radical, nitroarenes, and nitrosamines.

**Ground-level Ozone (Smog)** - is formed when  $\text{NO}_x$  and volatile organic compounds (VOCs) react in the presence of heat and sunlight. Children, the elderly, people with lung diseases such as asthma, and people who work or exercise outside are susceptible to adverse effects such as damage to lung tissue and reduction in lung function. Ozone can be transported by wind currents and cause health impacts far from the original sources. Millions of Americans live in areas that do not meet the health standards for ozone. Other impacts from ozone include damaged vegetation and reduced crop yields.



**Particles** -  $\text{NO}_x$  react with ammonia, moisture, and other compounds to form nitric acid vapor and related particles. Human health concerns include effects on breathing and the respiratory system, damage to lung tissue, and premature death. Small particles penetrate deeply into sensitive parts of the lungs and can cause or worsen respiratory disease, such as emphysema and bronchitis, and aggravate existing heart disease.



**Global Warming** - One member of the  $\text{NO}_x$  family, nitrous oxide, is a greenhouse gas. It accumulates in the atmosphere with other greenhouse gases causing a gradual rise in the earth's temperature. This will lead to increased risks to human health, a rise in the sea level, and other adverse changes to plant and animal habitat.

203. A recent study published in NATURE estimates that there are 38,000 deaths worldwide due to excess NOx emissions.

204. GM and Bosch will not be able to make the Polluting Vehicles comply with emissions standards without substantially degrading their performance characteristics, including their horsepower and their fuel efficiency. As a result, even if GM and Bosch are able to make Class members' Polluting Vehicles EPA-compliant, Class members will nonetheless suffer actual harm and damages because their vehicles will no longer perform as they did when purchased and as advertised. This will necessarily result in a diminution in value of every Polluting Vehicle and it will cause owners of Polluting Vehicles to pay more for fuel while using their Polluting Vehicles; and it results in Class members overpaying for their vehicles at the time of purchase.

205. Plaintiffs and members of the Class paid a premium of nearly \$9,000, as GM charged more for its Duramax engine than a comparable gas car. For example, here is an advertisement for a 2016 Sierra 2500 indicating the Duramax costs an additional \$8,595:<sup>53</sup>

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<sup>53</sup> Exhibit 43, 2016 Sierra 2500HD Build Your Own Vehicle webpage, <http://www.gmfleet.com/previous-model-year/gmc/sierra-2500hd-heavy-duty-truck/build-your-own.html>.

**2016 SIERRA 2500 HD  
REGULAR CAB, LONG  
BOX SIERRA 2WD**

**\$34,730\***

**VIEW STANDARD EQUIPMENT**

**VIEW:** [Package](#) [Mechanica](#) [Exterior](#) [Interior](#) [Safety](#)

**PACKAGE**

<a href="#">Convenience Package</a>	\$1,275
<a href="#">Gooseneck / 5th Wheel Prep Package</a>	\$370
<a href="#">Hitch Package</a>	\$295

**MECHANICAL**

<a href="#">Pickup box</a>	\$0
<a href="#">Handling/Trailer Suspension Package</a>	\$0
<a href="#">Vortec® 6.0L Variable Valve Timing V8 SFI engine</a>	\$0
<a href="#">6.0L V8 SFI (CNG) Gaseous engine</a>	\$0
<a href="#">Duramax® 6.6L Turbo-Diesel V8 engine</a>	\$8,595
<a href="#">Heavy-duty 6-speed electronically controlled automatic transmission</a>	\$0
<a href="#">Allison® 1000 6-speed automatic transmission</a>	\$0
<a href="#">9300-lb. GVWR<sup>1</sup></a>	\$0
<a href="#">9,900-lb. GVWR<sup>2</sup></a>	\$0
<a href="#">4.10 rear axle ratio (Gas engine)</a>	\$0
<a href="#">3.73 rear axle ratio (Diesel engine)</a>	\$100
<a href="#">Engine block heater</a>	\$90
<a href="#">High Idle switch</a>	\$200
<a href="#">730 cold-cranking amps battery</a>	\$135
<a href="#">No Selection</a>	\$0
<a href="#">220-amp alternator</a>	\$150
<a href="#">Dual, 150 amps and 220 amps each alternators</a>	\$380
<a href="#">Trailer Package</a>	\$280
<a href="#">Trailer wiring provisions</a>	\$35
<a href="#">Integrated trailer brake controller</a>	\$275
<a href="#">Underbody shields</a>	\$150

EXTERIOR: [FRONT](#) [BACK](#) [SIDE](#) INTERIOR: [FRONT](#) [SIDE](#)



Some configurations, options, accessories, and/or colors may not be shown. Some images may depict optional equipment.



206. As a result of GM's unfair, deceptive, and/or fraudulent business practices, and its failure to disclose that under normal operating conditions the Polluting Vehicles are not "clean" diesels, emit more pollutants than do gasoline-powered vehicles, and emit more pollutants than permitted under federal and state laws, owners and/or lessees of the Polluting Vehicles have suffered losses in

money and/or property. Had Plaintiffs and Class members known of the higher emissions at the time they purchased or leased their Polluting Vehicles, they would not have purchased or leased those vehicles, or would have paid substantially less for the vehicles than they did. Moreover, when and if GM recalls the Polluting Vehicles and degrades the GM Clean Diesel engine performance and fuel efficiency in order to make the Polluting Vehicles compliant with EPA standards, Plaintiffs and Class members will be required to spend additional sums on fuel and will not obtain the performance characteristics of their vehicles when purchased. Moreover, Polluting Vehicles will necessarily be worth less in the marketplace because of their decrease in performance and efficiency and increased wear on their cars' engines.

207. Without cheating emissions, GM could not achieve the fuel economy and range that it promises. Moreover, when and if GM recalls the Polluting Vehicles and degrades the Duramax engine performance in order to make the Polluting Vehicles compliant with EPA standards, Plaintiffs and Class members will be required to spend additional sums on fuel and will not obtain the performance characteristics of their vehicles as promised when purchased. And Polluting Vehicles will necessarily be worth less in the marketplace because of their decrease in performance and efficiency and increased wear on their vehicles' engines and this results in an overpayment by Plaintiffs at the time of purchase.

**K. The GM Scheme Is Just the Latest in a Worldwide Diesel Emissions Cheating Scandal That Adds Plausibility to the Allegations as Virtually All Diesel Manufacturers Are Falsely Advertising Their Vehicles**

208. As noted, the world was shocked to learn that Volkswagen had manufactured over 11 million cars that were on the road in violation of European emissions standards, and over 480,000 vehicles were operating in the U.S. in violation of EPA and state standards. But Volkswagen was not the only manufacturer of vehicles that exceeded emissions standards.

209. In the wake of the major scandal involving Volkswagen and Audi diesel vehicles evading emissions standards with the help of certain software that manipulates emissions controls (called “defeat devices”),<sup>54</sup> scientific literature and reports and testing indicate that most of the diesel vehicle manufactures of so-called “clean diesel” vehicles emit far more pollution on the road than in lab tests. The EPA has widened its probe of auto emissions to include, for example, the Mercedes E250 BlueTEC.

210. In May 2015, a study conducted on behalf of the Dutch Ministry of Infrastructure and the Environment found that all sixteen vehicles made by a

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<sup>54</sup> Exhibit 44, EPA’s Sept. 18, 2015 Notice of Violation to Volkswagen Group of America, Inc., available at <https://www.epa.gov/sites/production/files/2015-10/documents/vw-nov-caa-09-18-15.pdf>. As detailed in the NOV, software in Volkswagen and Audi diesel vehicles detects when the vehicle is undergoing official emissions testing and turns full emissions controls on only during the test. But otherwise, while the vehicle is running, the emissions controls are suppressed. This results in cars that meet emissions standards in the laboratory or at the state testing station, but during normal operation they emit NOx at up to 40 times the standard allowed under U.S. laws and regulations. Volkswagen has admitted to installing a defeat device in its diesel vehicles.

variety of manufacturers, when tested, emitted significantly more NOx on real-world trips while they passed laboratory tests. The report concluded that “[i]n most circumstances arising in normal situations on the road, the system scarcely succeeded in any effective reduction of NOx emissions.”<sup>55</sup>

211. The report further remarked:<sup>56</sup>

It is remarkable that the NOx emission under real-world conditions exceeds the type approval value by [so much]. It demonstrates that the settings of the engine, the EGR and the SCR during a real-world test trip are such that they do not result in low NOx emissions in practice. In other words: *In most circumstances arising in normal situations on the road, the systems scarcely succeed in any effective reduction of NOx emissions.*

The lack of any “effective reduction of NOx emissions” is a complete contradiction of GM’s claim that its vehicles are clean.

212. Other organizations are beginning to take notice of the emissions deception. The Transportation and Environment (T&E) organization, a European group aimed at promoting sustainable transportation, compiled data from “respected testing authorities around Europe.” T&E stated in September 2015 that real-world emissions testing showed drastic differences from laboratory tests such that models tested emitted more pollutants on the road than in their laboratory

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<sup>55</sup> Exhibit 45, *Detailed investigations and real-world emission performance of Euro 6 diesel passenger cars*, TNO (May 18, 2015), <http://publications.tno.nl/publication/34616868/a1Ug1a/TNO-2015-R10702.pdf>.

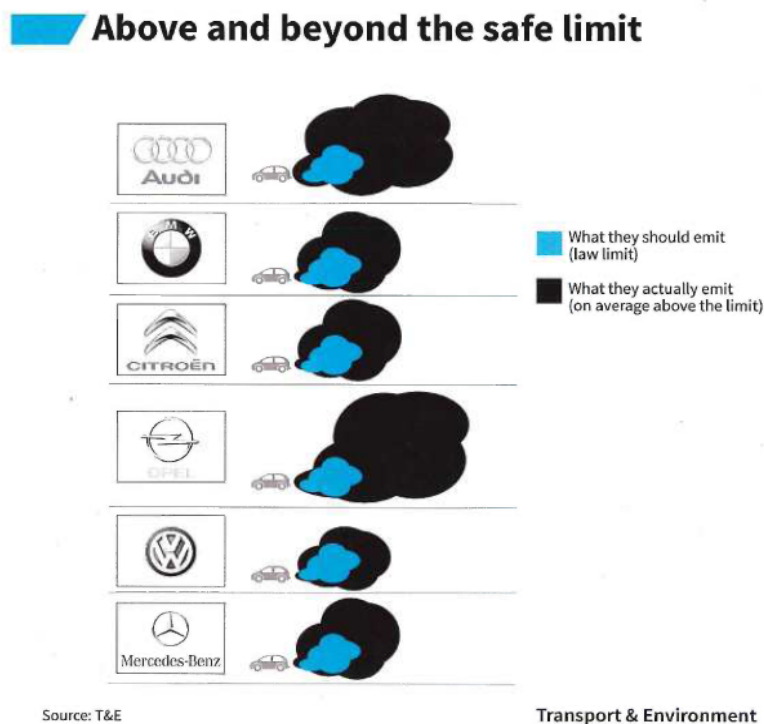
<sup>56</sup> *Id.* at 6 (emphasis added).

tests. “For virtually every new model that comes onto the market the gap between test and real-world performance leaps,” the report asserts.<sup>57</sup>

213. In a summary report, T&E graphically depicted the widespread failure of most manufacturers:<sup>58</sup>

**2. The problem is endemic across the car industry – but the performance of individual models and manufacturers varies widely**

In tests by the ICCT<sup>1</sup> 12 out of 13 modern diesel cars failed to achieve the Euro 6 limit in on the road. The worst vehicle, an Audi, emitted 22 times the allowed limit. Emissions are highest in urban areas where most people are exposed to the pollution. On average a new diesel car emits **over** 800mg/km of nitrogen oxides driving in town compared to the limit of 80mg/km. Data obtained on around 20 modern diesel cars by T&E shows every major manufacturer is selling cars that fail to meet Euro 6 limits on the road. A minority of vehicles do meet the limits – but most don't. This is because the industry uses cheaper less effective exhaust treatment systems or fails to configure the best systems in a way that minimizes emissions. The cost of a modern diesel after treatment system is just €300.



<sup>57</sup> Exhibit 46, *VW's cheating is just the tip of the iceberg*, Transport & Environment (Sept. 21, 2015), <http://www.transportenvironment.org/publications/vw%E2%80%99s-cheating-just-tip-iceberg>.

<sup>58</sup> Exhibit 47, *Five facts about diesel the car industry would rather not tell you*, Transport & Environment (Sept. 2015), [http://www.transportenvironment.org/sites/te/files/publications/2015\\_09\\_Five\\_facts\\_about\\_diesel\\_FINAL.pdf](http://www.transportenvironment.org/sites/te/files/publications/2015_09_Five_facts_about_diesel_FINAL.pdf).

214. The T&E report found that the current system for testing cars in a laboratory produces “meaningless results.”<sup>59</sup>

215. Emissions Analytics is a U.K. company which says that it was formed to “overcome the challenge of finding accurate fuel consumption and emissions figures for road vehicles.” With regard to its recent on-road emissions testing, the company explains:<sup>60</sup>

[I]n the European market, we have found that real-world emissions of the regulated nitrogen oxides are four times above the official level, determined in the laboratory. Real-world emissions of carbon dioxide are almost one-third above that suggested by official figures. For car buyers, this means that fuel economy on average is one quarter worse than advertised. This matters, even if no illegal activity is found.

## VI. TOLLING OF THE STATUTE OF LIMITATIONS

### A. Discovery Rule Tolling

216. Class members had no way of knowing about GM’s deception with respect to the comparatively and unlawfully high emissions of its GM Clean Diesel engine system in the Polluting Vehicles. To be sure, GM continues to market the Polluting Vehicles as “clean” diesels that have lower emissions than gasoline vehicles and also continues to claim that the Polluting Vehicles comply with EPA emissions standards.

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<sup>59</sup> *Id.*

<sup>60</sup> Exhibit 48, Emissions Analytics Press Release (Sept. 28, 2015), available at <http://www.abvwc.com/home/emissions-analytics>.

217. Within the period of any applicable statutes of limitation, Plaintiffs and members of the proposed Classes could not have discovered through the exercise of reasonable diligence that GM was concealing the conduct complained of herein and misrepresenting the Company's true position with respect to the emission qualities of the Polluting Vehicles.

218. Plaintiffs and the other Class members did not discover, and did not know of, facts that would have caused a reasonable person to suspect that GM did not report information within its knowledge to federal and state authorities, its dealerships, or consumers; nor would a reasonable and diligent investigation have disclosed that GM had concealed information about the true emissions of the Polluting Vehicles, which was discovered by Plaintiffs only shortly before this action was filed. Nor in any event would such an investigation on the part of Plaintiffs and other Class members have disclosed that GM valued profits over truthful marketing and compliance with the law.

219. For these reasons, all applicable statutes of limitation have been tolled by operation of the discovery rule with respect to claims as to the Polluting Vehicles.

**B. Fraudulent Concealment Tolling**

220. All applicable statutes of limitation have also been tolled by GM's knowing and active fraudulent concealment and denial of the facts alleged herein throughout the period relevant to this action.

221. Instead of disclosing its emissions scheme, or that the quality and quantity of emissions from the Polluting Vehicles were far worse than represented, and of its disregard of the law, GM falsely represented that the Polluting Vehicles had emissions cleaner than their gasoline-powered counterparts, complied with federal and state emissions standards, that the diesel engines were "clean," and that it was a reputable manufacturer whose representations could be trusted.

**C. Estoppel**

222. GM was under a continuous duty to disclose to Plaintiffs and the other Class members the true character, quality, and nature of emissions from the Polluting Vehicles and of those vehicles' emissions systems.

223. GM knowingly, affirmatively, and actively concealed or recklessly disregarded the true nature, quality, and character of the emissions systems, and the emissions, of the Polluting Vehicles.

224. Based on the foregoing, GM is estopped from relying on any statutes of limitations in defense of this action.

## VII. CLASS ALLEGATIONS

225. Plaintiffs bring this action on behalf of themselves and as a class action, pursuant to the provisions of Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure, on behalf of the following class (collectively, the “Class”):

All persons who purchased or leased a model year 2011-2016 GM Silverado 2500HD or 3500HD, or a GM Sierra 2500HD or 3500HD (the “Polluting Vehicles”).

226. Excluded from the Class are individuals who have personal injury claims resulting from the high emissions in the Polluting Vehicles. Also excluded from the Class are GM and its subsidiaries and affiliates; all persons who make a timely election to be excluded from the Class; governmental entities; the Judge to whom this case is assigned and his/her immediate family; and Plaintiffs’ Counsel. Plaintiffs reserve the right to revise the Class definition based upon information learned through discovery.

227. Certification of Plaintiffs’ claims for class-wide treatment is appropriate because Plaintiffs can prove the elements of their claims on a class-wide basis using the same evidence as would be used to prove those elements in individual actions alleging the same claim.

228. This action has been brought and may be properly maintained on behalf of the Class proposed herein under Federal Rule of Civil Procedure 23.

229. **Numerosity**. Federal Rule of Civil Procedure 23(a)(1): The members of the Class are so numerous and geographically dispersed that individual joinder

of all Class members is impracticable. For purposes of this complaint, Plaintiffs allege that there are estimated to be 705,000 or more vehicles in the Class. The precise number of Class members is unknown to Plaintiffs but may be ascertained from GM's books and records. Class members may be notified of the pendency of this action by recognized, Court-approved notice dissemination methods, which may include U.S. Mail, electronic mail, Internet postings, and/or published notice.

230. **Commonality and Predominance**: Federal Rule of Civil Procedure 23(a)(2) and 23(b)(3): This action involves common questions of law and fact, which predominate over any questions affecting individual Class members, including, without limitation:

- a) Whether GM and Bosch engaged in the conduct alleged herein;
- b) Whether GM designed, advertised, marketed, distributed, leased, sold, or otherwise placed Polluting Vehicles into the stream of commerce in the United States;
- c) Whether the GM engine system in the Polluting Vehicles emit pollutants at levels that do not make them "clean" diesels and that do not comply with EPA requirements;
- d) Whether GM and Bosch knew about the comparatively and unlawfully high emissions and, if so, how long GM and Bosch have known;

e) Whether GM designed, manufactured, marketed, and distributed Polluting Vehicles with defective or otherwise inadequate emission controls;

f) Whether GM and Bosch's conduct violates RICO and consumer protection statutes, and constitutes breach of contract and fraudulent concealment, as asserted herein;

g) Whether there is an Enterprise;

h) Whether Bosch participated in the Enterprise;

i) Whether Plaintiffs and the other Class members overpaid for their vehicles at the point of sale; and

j) Whether Plaintiffs and the other Class members are entitled to damages and other monetary relief and, if so, in what amount.

231. **Typicality**: Federal Rule of Civil Procedure 23(a)(3): Plaintiffs' claims are typical of the other Class members' claims because, among other things, all Class members were comparably injured through GM's wrongful conduct as described above.

232. **Adequacy**: Federal Rule of Civil Procedure 23(a)(4): Plaintiffs are adequate Class representatives because their interests do not conflict with the interests of the other members of the Classes they seek to represent; Plaintiffs have retained counsel competent and experienced in complex class action litigation; and

Plaintiffs intend to prosecute this action vigorously. The Classes' interests will be fairly and adequately protected by Plaintiffs and their counsel.

233. **Superiority**: Federal Rule of Civil Procedure 23(b)(3): A class action is superior to any other available means for the fair and efficient adjudication of this controversy, and no unusual difficulties are likely to be encountered in the management of this class action. The damages or other financial detriment suffered by Plaintiffs and the other Class members are relatively small compared to the burden and expense that would be required to individually litigate their claims against GM, so it would be impracticable for the members of the Classes to individually seek redress for GM's wrongful conduct. Even if Class members could afford individual litigation, the court system could not. Individualized litigation creates a potential for inconsistent or contradictory judgments and increases the delay and expense to all parties and the court system. By contrast, the class action device presents far fewer management difficulties and provides the benefits of single adjudication, economy of scale, and comprehensive supervision by a single court.

## **VIII. CLAIMS**

### **A. Claims Brought on Behalf of the Nationwide RICO Class**

#### **COUNT 1**

#### **VIOLATIONS OF RACKETEER INFLUENCED AND CORRUPT ORGANIZATIONS ACT (RICO) VIOLATION OF 18 U.S.C. § 1962(C), (D)**

234. Plaintiffs incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

235. Plaintiffs bring this Count individually and on behalf of the Nationwide RICO Class against Defendants GM, Robert Bosch GmbH, and Robert Bosch LLC (collectively, “RICO Defendants”).

236. The RICO Defendants are all “persons” under 18 U.S.C. § 1961(3) because they are capable of holding, and do hold, “a legal or beneficial interest in property.”

237. Section 1962(c) makes it “unlawful for any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce, to conduct or participate, directly or indirectly, in the conduct of such enterprise’s affairs through a pattern of racketeering activity.” Section 1962(d), in turn, makes it unlawful for “any person to conspire to violate.”

238. For many years now, the RICO Defendants have aggressively sought to increase the sales of Polluting Vehicles in an effort to bolster revenue, augment profits, and increase GM’s share of the diesel truck market. Finding it impossible

to achieve their goals lawfully, however, the RICO Defendants resorted instead to orchestrating a fraudulent scheme and conspiracy. In particular, the RICO Defendants, along with other entities and individuals, created and/or participated in the affairs of an illegal enterprise (“Clean Diesel Fraud Enterprise”) whose direct purpose was to deceive the regulators and the public into believing the Polluting Vehicles were “clean” and “environmentally friendly.” As explained in greater detail below, the RICO Defendants’ acts in furtherance of the Clean Diesel Fraud Enterprise violate Section 1962(c) and (d).

**1. The members of the Clean Diesel Fraud Enterprise**

239. Upon information and belief, the Clean Diesel Fraud Enterprise consisted of at least the following entities and individuals: GM, Robert Bosch GmbH, and Robert Bosch LLC.

240. Robert Bosch GmbH and Robert Bosch LLC tested, manufactured, and sold the electronic control module (ECM) that managed the emissions control system used by GM in the Polluting Vehicles. This particular ECM is more formally referred to as the Electronic Diesel Control Unit 17.

241. Defendant Bosch GmbH is a multinational engineering and electronics company headquartered in Gerlingen, Germany, which has hundreds of subsidiaries and companies. It wholly owns defendant Bosch LLC, a Delaware limited liability company headquartered in Farmington Hills, Michigan. As

explained above, Bosch's sectors and divisions are grouped by subject matter, not location. Mobility Solutions (formerly Automotive Technology) is the Bosch sector at issue, particularly its Diesel Services division, and it encompasses employees of Bosch GmbH and Bosch LLC. These individuals were responsible for the design, manufacture, development, customization, and supply of the defeat device to GM for use in the Polluting Vehicles.

242. Bosch worked with GM, Volkswagen, Mercedes, and FCA to develop and implement a specific and unique set of software algorithms to surreptitiously evade emissions regulations. Bosch customized their EDC Unit 17s for installation in the Polluting Vehicles with unique software code to detect when it was undergoing emissions testing, as described above, and did so for other vehicles with defeat devices in Volkswagen and Mercedes vehicles.<sup>61</sup>

243. Bosch's conduct with respect to Volkswagen and other manufacturers, outlined below, adds plausibility to its participation in the enterprise described herein. For example, Bosch was well aware that the EDC Unit 17 would be used by automobile manufacturers, including GM, to cheat on emissions testing. Bosch was also critical to the concealment of the defeat device in communications with

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<sup>61</sup> Exhibit 24, Michael Taylor, *EPA Investigating Bosch over VW Diesel Cheater Software*, Car and Driver (Nov. 23, 2015), <http://blog.caranddriver.com/epa-investigating-bosch-over-vw-diesel-cheater-software/>.

U.S. regulators and went even further to actively lobby U.S. lawmakers on behalf of Volkswagen and its “clean diesel” vehicles.

244. EDC Unit 17 could not effectively lower NOx emissions to legal levels during normal operating conditions. In order to pass the emissions test, then, EDC Unit 17 is equipped with a “defeat device,” which is software that allows the vehicle to determine whether it is being operated under normal conditions or testing conditions.

245. The EDC 17 ECU was manufactured by Bosch GmbH and sold to GM. Bosch built the ECU hardware and developed the software running in the ECU. Bosch developed a “function sheet” that documents the functional behavior of a particular release of the ECU firmware. All function sheets used in the GM EDC, on information and belief, bear a “Robert Bosch GmbH” copyright.

246. As was publicly reported, the Bosch defendants, seeking to conceal their involvement in the unlawful Clean Diesel Fraud Enterprise, sent a letter to Volkswagen AG in 2007 stating that Volkswagen Diesels *could not be lawfully operated* if the LNT or SCR after-treatment system was disabled.<sup>62</sup> The exact same logic applies to the GM Polluting Vehicles—*i.e.*, they could not be lawfully operated with the defeat device.

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<sup>62</sup> Exhibit 49, Stef Shrader, *Feds Are Now Investigating Volkswagen Supplier Bosch Over Dieselgate*, Jalopnik (Nov. 19, 2015), <http://jalopnik.com/feds-are-now-investigating-volkswagen-supplier-bosch-ov-1743624448>.

247. Indeed, notwithstanding their knowledge that the Volkswagen Diesels *could not be lawfully operated* if the emissions system was disabled, the Bosch defendants, driven to cement their position as a leading supplier of diesel emissions equipment, went on to sell approximately *eleven million* EDC Unit 17s to Volkswagen over an eight-year period and sold hundreds of thousands of EDC units to GM for use in Polluting Vehicles, as well as hundreds of thousands of units to Mercedes and FCA.<sup>63</sup>

248. The persons and entities described in the preceding section are members of and constitute an “association-in-fact” enterprise.

249. At all relevant times, the Clean Diesel Fraud Enterprise: (a) had an existence separate and distinct from each Defendant; (b) was separate and distinct from the pattern of racketeering in which the RICO Defendants engaged; and (c) was an ongoing organization consisting of legal entities, including GM, the Bosch defendants, and other entities and individuals associated for the common purpose of designing, manufacturing, distributing, testing, and selling the Polluting Vehicles through fraudulent COCs and EOs, false emissions tests, deceptive and misleading marketing and materials, and deriving profits and revenues from those activities. Each member of the Clean Diesel Fraud Enterprise shared in the bounty

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<sup>63</sup> Exhibit 24, Michael Taylor, *EPA Investigating Bosch over VW Diesel Cheater Software*, Car and Driver (Nov. 23, 2015), <http://blog.caranddriver.com/epa-investigating-bosch-over-vw-diesel-cheater-software/>.

generated by the enterprise—*i.e.*, by sharing the benefit derived from increased sales revenue generated by the scheme to defraud consumers and franchise dealers alike nationwide.

250. The Clean Diesel Fraud Enterprise functioned by selling vehicles and component parts to the consuming public. Many of these products are legitimate, including vehicles that do not contain defeat devices and software capable of allowing the engine to manipulate the software such that the emissions system is turned on or off at certain times. However, the RICO Defendants and their co-conspirators, through their illegal Enterprise, engaged in a pattern of racketeering activity, which involves a fraudulent scheme to increase revenue for Defendants and the other entities and individuals associated-in-fact with the Enterprise's activities through the illegal scheme to sell the Polluting Vehicles.

251. The Clean Diesel Fraud Enterprise engaged in and its activities affected interstate and foreign commerce because it involved commercial activities across state boundaries, such as the marketing, promotion, advertisement and sale or lease of the Polluting Vehicles throughout the country and the receipt of monies from the sale of the same.

252. Within the Clean Diesel Fraud Enterprise, there was a common communication network by which co-conspirators shared information on a regular basis. The Clean Diesel Fraud Enterprise used this common communication

network for the purpose of manufacturing, marketing, testing, and selling the Polluting Vehicles to the general public nationwide.

253. Each participant in the Clean Diesel Fraud Enterprise had a systematic linkage to each other through corporate ties, contractual relationships, financial ties, and continuing coordination of activities. Through the Clean Diesel Fraud Enterprise, the RICO Defendants functioned as a continuing unit with the purpose of furthering the illegal scheme and their common purposes of increasing their revenues and market share, and minimizing losses.

254. The RICO Defendants participated in the operation and management of the Clean Diesel Fraud Enterprise by directing its affairs, as described herein. While the RICO Defendants participated in, and are members of, the enterprise, they have a separate existence from the enterprise, including distinct legal statuses, different offices and roles, bank accounts, officers, directors, employees, individual personhood, reporting requirements, and financial statements.

255. GM exerted substantial control and participated in the affairs of the Clean Diesel Fraud Enterprise by:

- a. Designing in conjunction with Robert Bosch GmbH the Polluting Vehicles with defeat devices;
- b. Failing to correct or disable the defeat devices;
- c. Manufacturing, distributing, and selling the Polluting Vehicles that emitted greater pollution than allowable under the applicable regulations;

- d. Misrepresenting and omitting (or causing such misrepresentations and omissions to be made) vehicle specifications on COC and EO applications;
- e. Introducing the Polluting Vehicles into the stream of U.S. commerce without a valid COC and/or EO;
- f. Concealing the existence of the defeat devices and the unlawfully high emissions from regulators and the public;
- g. Persisting in the manufacturing, distribution, and sale of the Polluting Vehicles even after questions were raised about the emissions testing and discrepancies concerning the same;
- h. Misleading government regulators as to the nature of the defeat devices and the defects in the Polluting Vehicles;
- i. Misleading the driving public as to the nature of the defeat devices and the defects in the Polluting Vehicles;
- j. Designing and distributing marketing materials that misrepresented and concealed the defects in the vehicles;
- k. Otherwise misrepresenting or concealing the defective nature of the Polluting Vehicles from the public and regulators; and
- l. Illegally selling and/or distributing the Polluting Vehicles; collecting revenues and profits from the sale of such products; and ensuring that the other RICO Defendants and unnamed co-conspirators complied with the fraudulent scheme.

256. Bosch also participated in, operated, and/or directed the Clean Diesel Fraud Enterprise. Bosch participated in the fraudulent scheme by manufacturing, installing, testing, modifying, and supplying the EDC Unit 17 which operated as a “defeat device” in the Polluting Vehicles. Bosch exercised tight control over the

coding and other aspects of the defeat device software and closely collaborated with GM to develop, customize, and calibrate the defeat devices. Additionally, Bosch continuously cooperated with GM to ensure that the EDC Unit 17 was fully integrated into the Polluting Vehicles. Bosch also participated in the affairs of the Enterprise by concealing the defeat devices on U.S. documentation and in communications with U.S. regulators. Bosch collected tens of millions of dollars in revenues and profits from the hidden defeat devices installed in the Polluting Vehicles.

257. Without the RICO Defendants' willing participation, including Bosch's active involvement in developing and supplying the critical defeat devices for the Polluting Vehicles, the Clean Diesel Fraud Enterprise's scheme and common course of conduct would not have been successful.

258. The RICO Defendants directed and controlled the ongoing organization necessary to implement the scheme at meetings and through communications of which Plaintiffs cannot fully know at present because such information lies in the Defendants' and others' hands.

259. The members of the Clean Diesel Fraud Enterprise all served a common purpose; namely, to outsell their law-abiding competitors and increase their revenues through the sale of as many Polluting Vehicles (including the emissions components made and sold by Bosch) as possible. Each member of the

Clean Diesel Fraud Enterprise shared the bounty generated by the enterprise—*i.e.*, by sharing the benefit derived from increased sales revenue generated by the scheme to defraud. GM sold more Polluting Vehicles by utilizing an emissions control system that was cheaper to install and allowed for generous performance and efficiency tuning, all while charging consumers a premium for purportedly “clean” and “fuel efficient” Polluting Vehicles. The Bosch defendants, in turn, sold more EDC Units because GM manufactured and sold more Polluting Vehicles. The RICO Defendants achieved their common purpose by repeatedly misrepresenting and concealing the nature of the Polluting Vehicles and the ability of the emissions control systems (including the Bosch-supplied parts) to effectively reduce toxic emissions during normal operating conditions.

260. The RICO Defendants continued their enterprise even after the Volkswagen scandal became public in September 2015. GM continued to manufacture and sell 2016 Polluting Vehicles. Assuming top executives at GM did not know of the defeat devices in its vehicles (an assumption not true of Volkswagen or Bosch), a responsible chief executive would have inquired: Do we have a diesel problem? Either top executives at GM failed to ask questions or they agreed to continue a cover-up because GM did not stop selling Polluting Vehicles and has continued to conceal the truth.

## **2. The Predicate Acts**

261. To carry out, or attempt to carry out, the scheme to defraud, the RICO Defendants conducted or participated in the conduct of the affairs of the Clean Diesel Fraud Enterprise through a pattern of racketeering activity that employed the use of mail and wire facilities, in violation of 18 U.S.C. §§ 1341 (mail fraud) and 1343 (wire fraud).

262. Specifically, the RICO Defendants participated in the scheme to defraud by using mail, telephone, and the Internet to transmit writings travelling in interstate or foreign commerce.

263. The RICO Defendants' use of the mails and wires include but are not limited to the transmission, delivery, or shipment of the following by the RICO Defendants or third parties that were foreseeably caused to be sent as a result of Defendants' illegal scheme:

- a. Application for certificates submitted to the EPA and CARB;
- b. The Polluting Vehicles themselves;
- c. Component parts for the defeat devices;
- d. Essential hardware for the Polluting Vehicles;
- e. Falsified emission tests;
- f. Fraudulently-obtained COCs and EOs;
- g. Vehicle registrations and plates as a result of the fraudulently-obtained COCs and EOs;

- h. Documents and communications that facilitated the falsified emission tests;
- i. False or misleading communications intended to lull the public and regulators from discovering the defeat devices and/or other auxiliary devices;
- j. Sales and marketing materials, including advertising, websites, product packaging, brochures, and labeling, which misrepresented and concealed the true nature of the Polluting Vehicles;
- k. Documents intended to facilitate the manufacture and sale of the Polluting Vehicles, including bills of lading, invoices, shipping records, reports and correspondence;
- l. Documents to process and receive payment for the Polluting Vehicles by unsuspecting franchise dealers, including invoices and receipts;
- m. Payments to Bosch;
- n. Deposits of proceeds;
- o. SEC filings where GM has failed to disclose the scheme and has continued to do so post the Volkswagen scandal; and
- p. Other documents and things, including electronic communications.

264. The RICO Defendants utilized the interstate and international mail and wires for the purpose of obtaining money or property by means of the omissions, false pretense, and misrepresentations described therein.

265. The RICO Defendants also used the Internet and other electronic facilities to carry out the scheme and conceal the ongoing fraudulent activities. Specifically, GM made misrepresentations about the Polluting Vehicles on GM websites, YouTube, and through ads online, all of which were intended to mislead

regulators and the public about the fuel efficiency, emissions standards, and other performance metrics.

266. The RICO Defendants also communicated by U.S. Mail, by interstate facsimile, and by interstate electronic mail with various other affiliates, regional offices, divisions, dealerships, and other third-party entities in furtherance of the scheme.

267. The mail and wire transmissions described herein were made in furtherance of Defendants' scheme and common course of conduct to deceive regulators and consumers and lure consumers into purchasing the Polluting Vehicles, which Defendants knew or recklessly disregarded as emitting illegal amounts of pollution, despite their advertising campaign that the Polluting Vehicles were "clean" diesel cars or vehicles with a "remarkable reduction in emission."

268. Many of the precise dates of the fraudulent uses of U.S. Mail and interstate wire facilities have been deliberately hidden and cannot be alleged without access to Defendants' books and records. However, Plaintiffs have described the types of, and in some instances, occasions on which the predicate acts of mail and/or wire fraud occurred. They include thousands of communications to perpetuate and maintain the scheme, including the things and documents described in the preceding paragraphs.

269. The RICO Defendants have not undertaken the practices described herein in isolation, but as part of a common scheme and conspiracy. In violation of 18 U.S.C. § 1962(d), the RICO Defendants conspired to violate 18 U.S.C. § 1962(c), as described herein. Various other persons, firms, and corporations, including third-party entities and individuals not named as defendants in this Complaint, have participated as co-conspirators with the RICO Defendants in these offenses and have performed acts in furtherance of the conspiracy to increase or maintain revenues, increase market share, and/or minimize losses for the Defendants and their unnamed co-conspirators throughout the illegal scheme and common course of conduct.

270. The RICO Defendants aided and abetted others in the violations of the above laws, thereby rendering them indictable as principals in the 18 U.S.C. §§ 1341 and 1343 offenses.

271. To achieve their common goals, the RICO Defendants hid from the general public the unlawfulness and emission dangers of the Polluting Vehicles and obfuscated the true nature of the defect even after regulators raised concerns. The RICO Defendants suppressed and/or ignored warnings from third parties, whistleblowers, and governmental entities about the discrepancies in emissions testing and the defeat devices present in the Polluting Vehicles.

272. The RICO Defendants and each member of the conspiracy, with knowledge and intent, have agreed to the overall objectives of the conspiracy and participated in the common course of conduct to commit acts of fraud and indecency in designing, manufacturing, distributing, marketing, testing, and/or selling the Polluting Vehicles (and the defeat devices contained therein).

273. Indeed, for the conspiracy to succeed, each of the RICO Defendants and their co-conspirators had to agree to implement and use the similar devices and fraudulent tactics—specifically, complete secrecy about the defeat devices in the Polluting Vehicles.

274. The RICO Defendants knew and intended that government regulators, as well as Plaintiffs and Class members, would rely on the material misrepresentations and omissions made by them about the Polluting Vehicles. The RICO Defendants knew and intended that Plaintiffs and the Class would incur costs and damages as a result. As fully alleged herein, Plaintiffs and the Class relied upon Defendants' representations and omissions that were made or caused by them. Plaintiffs' reliance is made obvious by the fact that: (1) they purchased hundreds of thousands of vehicles that never should have been introduced into the U.S. stream of commerce and whose worth is far less than was paid. In addition, the EPA, CARB, and other regulators relied on the misrepresentations and material

omissions made or caused to be made by the RICO Defendants; otherwise, GM could not have obtained valid COCs and EOs to sell the Polluting Vehicles.

275. The RICO Defendants' conduct in furtherance of this scheme was intentional. Plaintiffs and the Class were harmed as a result of the RICO Defendants' intentional conduct. Plaintiffs, the Class, regulators, and consumers, among others, relied on the RICO Defendants' material misrepresentations and omissions.

276. As described herein, the RICO Defendants engaged in a pattern of related and continuous predicate acts for many years. The predicate acts constituted a variety of unlawful activities, each conducted with the common purpose of defrauding Plaintiffs and other Class members and obtaining significant monies and revenues from them and through them while providing Polluting Vehicles worth significantly less than the invoice price paid. The predicate acts also had the same or similar results, participants, victims, and methods of commission. The predicate acts were related and not isolated events.

277. The predicate acts all had the purpose of generating significant revenue and profits for the RICO Defendants at the expense of Plaintiffs, the Class, and consumers. The predicate acts were committed or caused to be committed by the RICO Defendants through their participation in the Clean Diesel Fraud Enterprise and in furtherance of its fraudulent scheme, and were interrelated in that

they involved obtaining Plaintiffs' and Class members' funds, artificially inflating the brand and dealership goodwill values, and avoiding the expenses associated with remediating the Polluting Vehicles.

278. During the design, manufacture, testing, marketing, and sale of the Polluting Vehicles, the RICO Defendants shared technical, marketing, and financial information that plainly revealed the emissions control systems in the Polluting Vehicles as the ineffective, illegal, and fraudulent piece of technology they were and are. Nevertheless, the RICO Defendants shared and disseminated information that deliberately represented Polluting Vehicles as "clean," "environmentally friendly," and "fuel efficient."

279. By reason of and as a result of the conduct of the RICO Defendants, and in particular its pattern of racketeering activity, Plaintiffs and the Class have been injured in multiple ways, including but not limited to:

- a. Overpayment for Polluting Vehicles, in that Plaintiffs and the Class at the time of purchase believed they were paying for vehicles that met certain emission and fuel efficiency standards and obtained vehicles that did not meet these standards and were worth less than what was paid;

- b. The value of the Polluting Vehicles has diminished, thus reducing their sale and resale value, and has resulted in a loss of property for Plaintiffs and the Class; and
- c. Plaintiffs have been wrongfully deprived of their property in that the price for their vehicles was artificially inflated by deliberate acts of false statements, omissions and concealment and by Defendants' acts of racketeering.

280. The RICO Defendants' violations of 18 U.S.C. § 1962(c) and (d) have directly and proximately caused injuries and damages to Plaintiffs and the Class, and Plaintiffs and the Class are entitled to bring this action for three times their actual damages, as well as injunctive/equitable relief, costs, and reasonable attorneys' fees pursuant to 18 U.S.C. § 1964(c). Each of the RICO Defendants knew, understood, and intended for members of the Class to purchase the Polluting Vehicles, and knew, understood, and foresaw that revelation of the truth would injure members of the Class.

## **B. State Law Claims**

### **COUNT 2**

#### **VIOLATION OF THE ARIZONA CONSUMER FRAUD ACT (ARIZONA REV. STAT. § 44-1521 *ET SEQ.*)**

281. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

282. This claim is brought by Plaintiffs on behalf of Arizona purchasers who are members of the class.

283. The Arizona Consumer Fraud Act (Arizona CFA) provides that “[t]he act, use or employment by any person of any deception, deceptive act or practice, fraud . . . , misrepresentation, or concealment, suppression or omission of any material fact with intent that others rely upon such concealment, suppression or omission, in connection with the sale . . . of any merchandise whether or not any person has in fact been misled, deceived or damaged thereby, is declared to be an unlawful practice.” ARIZ. REV. STAT. § 44-1522(A).

284. Defendants, Plaintiffs, and Class members are “persons” within the meaning of the Arizona CFA, ARIZ. REV. STAT. § 44-1521(6).

285. Each Polluting Vehicle at issue is “merchandise” within the meaning of ARIZ. REV. STAT. § 44-1521(5).

286. Defendants’ conduct, as set forth above, occurred in the conduct of trade or commerce.

287. Pursuant to the Arizona CFA, Plaintiffs seek monetary relief against each Defendant in an amount to be determined at trial. Plaintiffs also seek punitive damages because each Defendant engaged in aggravated and outrageous conduct with an evil mind.

288. Plaintiffs also seek an order enjoining each Defendant's unfair, unlawful, and/or deceptive practices, attorneys' fees, and any other just and proper relief available under the Arizona CFA.

### **COUNT 3**

#### **VIOLATION OF THE ARKANSAS DECEPTIVE TRADE PRACTICES ACT (ARK. CODE ANN. § 4-88-101 *ET SEQ.*)**

289. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

290. This claim is brought by Plaintiffs on behalf of Arkansas purchasers who are members of the class.

291. The Arkansas Deceptive Trade Practices Act (Arkansas DTPA) prohibits "[d]eceptive and unconscionable trade practices," which include but are not limited to "[e]ngaging in any . . . unconscionable false, or deceptive act or practice in business, commerce, or trade." ARK. CODE. ANN. § 4-88-107(a)(10). The Arkansas DTPA also prohibits, in connection with the sale or advertisement of any goods, "(1) the act, use, or employment by any person of any deception, fraud, or pretense; or (2) the concealment, suppression, or omission of any material fact with intent that other rely upon the concealment, suppression, or omission." ARK CODE. ANN. § 4-88-108.

292. Defendants, Plaintiffs, and Class members are “persons” within the meaning of ARK. CODE. ANN. § 4-88-102(5).

293. Each Polluting Vehicle at issue constitutes “goods” within the meaning of ARK. CODE ANN. § 4-88-102(4).

294. Plaintiffs seek monetary relief against Defendants in an amount to be determined at trial. Plaintiffs also seek punitive damages because Defendants acted wantonly in causing Plaintiffs’ and Class members’ injuries, or with such a conscious indifference to the consequences that malice may be inferred.

295. Plaintiffs also seek an order enjoining Defendants’ unfair, unlawful, and/or deceptive practices, attorneys’ fees, and any other just and proper relief available under the Arkansas DTPA.

#### **COUNT 4**

#### **VIOLATIONS OF THE CALIFORNIA UNFAIR COMPETITION LAW (CAL. BUS. & PROF. CODE § 17200 *ET SEQ.*)**

296. Plaintiffs (for purposes of all California Class Counts) incorporate by reference all paragraphs as though fully set forth herein.

297. This claim is brought by Plaintiffs on behalf of California purchasers who are members of the Class.

298. California’s Unfair Competition Law (UCL), CAL. BUS. & PROF. CODE § 17200 *et seq.*, proscribes acts of unfair competition, including “any

unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising.”

299. GM’s conduct, as described herein, was and is in violation of the UCL. GM’s conduct violates the UCL in at least the following ways:

- i. By failing to disclose that the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions;
- ii. By selling and leasing Polluting Vehicles that suffer from a defective emissions control system and that emit high levels of pollutants under normal driving conditions;
- iii. By knowingly and intentionally concealing from Plaintiffs and the other Class members that the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions and that the Polluting Vehicles suffer from a defective emissions control system and emit unlawfully high levels of pollutants under normal driving conditions;
- iv. By marketing Polluting Vehicles as reduced emissions vehicles possessing functional and defect-free, EPA-compliant diesel engine systems;
- vii. By violating other California laws, including California consumer protection laws and California laws governing vehicle emissions and emission testing requirements.

300. GM intentionally and knowingly misrepresented material facts regarding the Polluting Vehicles with an intent to mislead Plaintiffs and the Class.

301. In purchasing or leasing the Polluting Vehicles, Plaintiffs and the other Class members were deceived by GM's failure to disclose that the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions, that the emissions controls were defective, and that the Polluting Vehicles emitted unlawfully high levels of pollutants, including NOx, as described above.

302. Plaintiffs were also deceived by GM's portrayal of these vehicles as turning NOx into a "fine mist" (misleading since the emissions were not a fine mist but at times an environmental hazard), having "lower emissions" (misleading as at times they were materially and offensively high), accomplishing a "reasonable reduction in emissions" (misleading as at material times the emissions are high and environmentally offensive), and reducing emissions by a "whopping" amount (only under limited circumstances).

303. Plaintiffs and Class members reasonably relied upon GM's false misrepresentations. They had no way of knowing that GM's representations were false and gravely misleading. As alleged herein, GM engaged in extremely sophisticated methods of deception. Plaintiffs and Class members did not, and could not, unravel GM's deception on their own.

304. GM knew or should have known that its conduct violated the UCL.

305. GM owed Plaintiffs and the Class a duty to disclose the truth about its emissions systems manipulation because GM:

- a. Possessed exclusive knowledge that it manipulated the emissions system in the Polluting Vehicles to turn off or limit effectiveness in normal driving conditions;
- b. Intentionally concealed the foregoing from Plaintiffs and the Class; and/or
- c. Made incomplete representations that it manipulated the emissions system in the Polluting Vehicles to turn off or limit effectiveness in normal driving conditions, while purposefully withholding material facts from Plaintiffs and the Class that contradicted these representations.

306. GM had a duty to disclose that the NO<sub>x</sub> reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions, emits pollutants at a much higher rate than gasoline-powered vehicles, and that the emissions far exceeded those expected by a reasonable consumer. Plaintiffs and the other Class members relied on GM's material representations and/or omissions that the Polluting Vehicles they were purchasing were reduced emission vehicles, efficient, and free from defects.

307. GM's conduct proximately caused injuries to Plaintiffs and the other Class members.

308. Plaintiffs and the other Class members were injured and suffered ascertainable loss, injury-in-fact, and/or actual damage as a proximate result of GM's conduct in that Plaintiffs and the other Class members overpaid for their Polluting Vehicles, and/or their Polluting Vehicles have suffered a diminution in value. These injuries are the direct and natural consequence of GM's misrepresentations and omissions.

309. GM's violations present a continuing risk to Plaintiffs as well as to the general public. GM's unlawful acts and practices complained of herein affect the public interest.

310. GM's misrepresentations and omissions alleged herein caused Plaintiffs and the other Class members to make their purchases or leases of their Polluting Vehicles. Absent those misrepresentations and omissions, Plaintiffs and the other Class members would not have purchased or leased these vehicles, would not have purchased or leased these Polluting Vehicles at the prices they paid, and/or would have purchased or leased less expensive alternative vehicles that did not contain defective GM Clean Diesel engine systems that failed to comply with EPA and California emissions standards.

311. Accordingly, Plaintiffs and the other Class members have suffered injury in fact, including lost money or property, as a result of GM's misrepresentations and omissions.

312. Plaintiffs request that this Court enter such orders or judgments as may be necessary to restore to Plaintiffs and members of the Class any money it acquired by unfair competition, including restitution and/or restitutionary disgorgement, as provided in CAL. BUS. & PROF. CODE § 17203 and CAL. CIV. CODE § 3345; and for such other relief as may be appropriate.

#### **COUNT 5**

#### **VIOLATIONS OF THE CALIFORNIA FALSE ADVERTISING LAW (CAL. BUS. & PROF. CODE § 17500 *ET SEQ.*)**

313. Plaintiffs incorporate by reference all paragraphs as though fully set forth herein.

314. This claim is brought by Plaintiffs on behalf of California purchasers who are members of the Class.

315. CAL. BUS. & PROF. CODE § 17500 states: "It is unlawful for any . . . corporation . . . with intent directly or indirectly to dispose of real or personal property . . . to induce the public to enter into any obligation relating thereto, to make or disseminate or cause to be made or disseminated . . . from this state before the public in any state, in any newspaper or other publication, or any advertising device, . . . or in any other manner or means whatever, including over the Internet,

any statement . . . which is untrue or misleading, and which is known, or which by the exercise of reasonable care should be known, to be untrue or misleading.”

316. GM caused to be made or disseminated through California and the United States, through advertising, marketing and other publications, statements that were untrue or misleading, and which were known, or which by the exercise of reasonable care should have been known to GM, to be untrue and misleading to consumers, including Plaintiffs and the other Class members.

317. GM has violated § 17500 because the misrepresentations and omissions regarding the functionality, reliability, environmental-friendliness, and lawfulness of Polluting Vehicles as set forth in this Complaint were material and likely to deceive a reasonable consumer.

318. Plaintiffs and the other Class members have suffered an injury in fact, including the loss of money or property, as a result of GM’s unfair, unlawful, and/or deceptive practices. In purchasing or leasing their Polluting Vehicles, Plaintiffs and the other Class members relied on the misrepresentations and/or omissions of GM with respect to the functionality, reliability, environmental-friendliness, and lawfulness of the Polluting Vehicles. GM’s representations turned out not to be true because the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions and the Polluting Vehicles are distributed with GM Clean Diesel engine systems that include defective emissions

controls and a “Defeat Device.” Had Plaintiffs and the other Class members known this, they would not have purchased or leased their Polluting Vehicles and/or paid as much for them. Accordingly, Plaintiffs and the other Class members overpaid for their Polluting Vehicles.

319. All of the wrongful conduct alleged herein occurred, and continues to occur, in the conduct of GM’s business. GM’s wrongful conduct is part of a pattern or generalized course of conduct that is still perpetuated and repeated, both in the State of California and nationwide.

320. The facts concealed and omitted by GM to Plaintiffs and the other California Class members are material in that a reasonable consumer would have considered them to be important in deciding whether to purchase or lease the Polluting Vehicles or pay a lower price. Had Plaintiffs and the other California Class members known of the higher emissions at the time they purchased or leased their Polluting Vehicles, they would not have purchased or leased those vehicles, or would have paid substantially less for the vehicles than they did.

321. Plaintiffs have provided GM with notice of its violations of the CLRA pursuant to CAL. CIV. CODE § 1782(a). The notice was transmitted to GM on May 23, 2017.

322. Plaintiffs’ and the other California Class members’ injuries were proximately caused by GM’s fraudulent and deceptive business practices.

323. Therefore, Plaintiffs and the other California Class members are entitled to equitable and monetary relief under the CLRA.

324. Plaintiffs, individually and on behalf of the other Class members, request that this Court enter such orders or judgments as may be necessary to restore to Plaintiffs and the other Class members any money GM acquired by unfair competition, including restitution and/or restitutionary disgorgement, and for such other relief as may be appropriate.

**COUNT 6**  
**BREACH OF CONTRACT**  
**(BASED ON CALIFORNIA LAW)**

325. Plaintiffs incorporate by reference all paragraphs as though fully set forth herein.

326. This claim is brought by Plaintiffs on behalf of California purchasers who are members of the Class.

327. GM's misrepresentations and omissions alleged herein, including GM's failure to disclose the existence of the GM Clean Diesel engine system's defect and/or defective design of the emissions controls, caused Plaintiffs and the other Class members to make their purchases or leases of their Polluting Vehicles. Absent those misrepresentations and omissions, Plaintiffs and the other Class members would not have purchased or leased these Polluting Vehicles, would not have purchased or leased these Polluting Vehicles at the prices they paid, and/or

would have purchased or leased less expensive alternative vehicles that did not contain the defective GM Clean Diesel engine system and which were not marketed as including such a system. Accordingly, Plaintiffs and the other Class members overpaid for their Polluting Vehicles and did not receive the benefit of their bargain.

328. Each and every sale or lease of an Polluting Vehicle constitutes a contract between GM and the purchaser or lessee. GM breached these contracts by selling or leasing to Plaintiffs and the other Class members defective Polluting Vehicles and by misrepresenting or failing to disclose that the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions and the existence of the GM Clean Diesel engine system's defect and/or defective design of the emissions controls, including information known to GM, rendering each Polluting Vehicle non-EPA-compliant, and thus less valuable than vehicles not equipped with the defective GM Clean Diesel engine system.

329. As a direct and proximate result of GM's breach of contract, Plaintiffs and the Class have been damaged in an amount to be proven at trial, which shall include, but is not limited to, all compensatory damages, incidental and consequential damages, and other damages allowed by law.

**COUNT 7**

**FRAUDULENT CONCEALMENT  
(BASED ON CALIFORNIA LAW)**

330. Plaintiffs incorporate by reference all paragraphs as though fully set forth herein.

331. This claim is brought by Plaintiffs on behalf of California purchasers who are members of the Class.

332. GM intentionally concealed that the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions, that the Polluting Vehicles had defective emissions controls, emitted pollutants at a higher level than gasoline-powered vehicles, emitted pollutants higher than a reasonable consumer would expect in light of GM's advertising campaign, emitted high levels of pollutants such as NOx, and were non-compliant with EPA emission requirements, or GM acted with reckless disregard for the truth and denied Plaintiffs and the other Class members information that is highly relevant to their purchasing decision.

333. GM further affirmatively misrepresented to Plaintiffs in advertising and other forms of communication, including standard and uniform material provided with each car, that the Polluting Vehicles it was selling had no significant defects, were Earth-friendly and low emission vehicles, complied with EPA regulations, and would perform and operate properly when driven in normal usage.

334. GM knew these representations were false when made.

335. The Polluting Vehicles purchased or leased by Plaintiffs and the other Class members were, in fact, defective, emitting pollutants at a much higher rate than gasoline-powered vehicles and at a much higher rate than a reasonable consumer would expect in light of GM's advertising campaign, non-EPA-compliant, and unreliable because the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions.

336. GM had a duty to disclose that the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions and that these Polluting Vehicles were defective, employed a "Defeat Device," emitted pollutants at a much higher rate than gasoline-powered vehicles, that the emissions far exceeded those expected by a reasonable consumer, were non-EPA-compliant and unreliable, because Plaintiffs and the other Class members relied on GM's material representations that the Polluting Vehicles they were purchasing were reduced emission vehicles, efficient, and free from defects.

337. As alleged in this Complaint, at all relevant times, GM has held out the Polluting Vehicles to be reduced emissions and EPA-compliant. GM disclosed certain details about the GM Clean Diesel engine, but nonetheless, GM intentionally failed to disclose the important facts that the NOx reduction system in the Polluting Vehicles turns off or is limited during normal driving conditions and

that the Polluting Vehicles had defective emissions controls, deploy a “Defeat Device,” emitted higher levels of pollutants than expected by a reasonable consumer, emitted high levels of pollutants, and were non-compliant with EPA emissions requirements, making other disclosures about the emission system deceptive.

338. The truth about the defective emissions controls and GM’s manipulations of those controls, high emissions, the “Defeat Device,” and non-compliance with EPA emissions requirements was known only to GM; Plaintiffs and the Class members did not know of these facts and GM actively concealed these facts from Plaintiffs and Class members.

339. Plaintiffs and Class members reasonably relied upon GM’s deception. They had no way of knowing that GM’s representations were false and/or misleading. As consumers, Plaintiffs and Class members did not, and could not, unravel GM’s deception on their own. Rather, GM intended to deceive Plaintiffs and Class members by concealing the true facts about the Polluting Vehicle emissions.

340. GM also concealed and suppressed material facts concerning what is evidently the true culture of GM—one characterized by an emphasis on profits and sales above compliance with federal and state clean air laws and emissions regulations that are meant to protect the public and consumers. It also emphasized

profits and sales above the trust that Plaintiffs and Class members placed in its representations. Consumers buy diesel cars from GM because they feel they are clean diesel cars. They do not want to be spewing noxious gases into the environment. And yet, that is precisely what the Polluting Vehicles are doing.

341. GM's false representations were material to consumers, because they concerned the quality of the Polluting Vehicles, because they concerned compliance with applicable federal and state law and regulations regarding clean air and emissions, and also because the representations played a significant role in the value of the vehicles. As GM well knew, its customers, including Plaintiffs and Class members, highly valued that the vehicles they were purchasing or leasing were fuel efficient, clean diesel cars with reduced emissions, and they paid accordingly.

342. GM had a duty to disclose the emissions defect, defective design of the emissions controls, and violations with respect to the Polluting Vehicles because details of the true facts were known and/or accessible only to GM, because GM had exclusive knowledge as to such facts, and because GM knew these facts were not known to or reasonably discoverable by Plaintiffs or Class members. GM also had a duty to disclose because it made general affirmative representations about the qualities of its vehicles with respect to emissions, starting with references to them as *reduced emissions* diesel cars and as compliant with all laws in each

state, which were misleading, deceptive, and incomplete without the disclosure of the additional facts set forth above regarding the actual emissions of its vehicles, its actual philosophy with respect to compliance with federal and state clean air laws and emissions regulations, and its actual practices with respect to the vehicles at issue. Having volunteered to provide information to Plaintiffs and Class members, GM had the duty to disclose not just the partial truth, but the entire truth. These omitted and concealed facts were material because they directly impact the value of the Polluting Vehicles purchased or leased by Plaintiffs and Class members. Whether a manufacturer's products pollute, comply with federal and state clean air laws and emissions regulations, and whether that manufacturer tells the truth with respect to such compliance or non-compliance are material concerns to a consumer, including with respect to the emissions certifications testing their vehicles must pass. GM represented to Plaintiffs and Class members that they were purchasing or leasing *reduced emission* diesel vehicles, when in fact, they were purchasing or leasing defective, high emission vehicles.

343. GM actively concealed and/or suppressed these material facts, in whole or in part, to pad and protect its profits and to avoid the perception that its vehicles were not clean diesel vehicles and did not or could not comply with federal and state laws governing clean air and emissions, which perception would

hurt the brand's image and cost GM money, and it did so at the expense of Plaintiffs and Class members.

344. GM has still not made full and adequate disclosures, and continues to defraud Plaintiffs and Class members by concealing material information regarding the emissions qualities of its referenced vehicles.

345. Plaintiffs and Class members were unaware of the omitted material facts referenced herein, and they would not have acted as they did if they had known of the concealed and/or suppressed facts, in that they would not have purchased purportedly reduced emissions diesel cars manufactured by GM, and/or would not have continued to drive their heavily polluting vehicles, or would have taken other affirmative steps in light of the information concealed from them. Plaintiffs' and Class members' actions were justified. GM was in exclusive control of the material facts, and such facts were not generally known to the public, Plaintiffs, or Class members.

346. Because of the concealment and/or suppression of the facts, Plaintiffs and Class members have sustained damage because they own vehicles that are diminished in value as a result of GM's concealment of the true quality and quantity of those vehicles' emissions and GM's failure to timely disclose the defect or defective design of the GM Clean Diesel engine system, the actual emissions qualities and quantities of GM-branded vehicles, and the serious issues engendered

by GM's corporate policies. Had Plaintiffs and Class members been aware of the true emissions facts with regard to the Polluting Vehicles, and the Company's disregard for the truth and compliance with applicable federal and state law and regulations, Plaintiffs and Class members who purchased or leased new or certified previously owned vehicles would have paid less for their vehicles or would not have purchased or leased them at all.

347. The value of Plaintiffs' and Class members' vehicles has diminished as a result of GM's fraudulent concealment of the defective emissions controls of the Polluting Vehicles, and of the high emissions of the Polluting Vehicles, and of the non-compliance with EPA emissions requirements, all of which has greatly tarnished the GM brand name attached to Plaintiffs' and Class members' vehicles and made any reasonable consumer reluctant to purchase any of the Polluting Vehicles, let alone pay what otherwise would have been fair market value for the vehicles.

348. Accordingly, GM is liable to Plaintiffs and Class members for damages in an amount to be proven at trial.

349. GM's acts were done wantonly, maliciously, oppressively, deliberately, with intent to defraud, and in reckless disregard of Plaintiffs' and Class members' rights and the representations that GM made to them in order to enrich GM. GM's conduct warrants an assessment of punitive damages in an

amount sufficient to deter such conduct in the future, which amount is to be determined according to proof.

**COUNT 8**

**VIOLATION OF THE LOUISIANA UNFAIR TRADE PRACTICES  
AND CONSUMER PROTECTION LAW  
(LA. REV. STAT. § 51:1401 *ET SEQ.*)**

350. Plaintiffs reallege and incorporate by reference all paragraphs as though fully set forth herein.

351. This claim is brought by Plaintiffs on behalf of Louisiana purchasers who are members of the Class

352. GM, Plaintiffs, and the Louisiana Class members are “persons” within the meaning of LA. REV. STAT. § 51:1402(8).

353. Plaintiffs and Louisiana Class members are “consumers” within the meaning of LA. REV. STAT. § 51:1402(1).

354. GM engaged in “trade” or “commerce” within the meaning of LA. REV. STAT. § 51:1402(9).

355. The Louisiana Unfair Trade Practices and Consumer Protection Law (“Louisiana CPL”) makes unlawful “deceptive acts or practices in the conduct of any trade or commerce.” LA. REV. STAT. § 51:1405(A). GM participated in misleading, false, or deceptive acts that violated the Louisiana CPL.

356. GM also engaged in unlawful trade practices by employing deception, deceptive acts or practices, fraud, misrepresentations, or concealment, suppression

or omission of any material fact with intent that others rely upon such concealment, suppression or omission, in connection with the sale of Polluting Vehicles.

357. GM's unfair or deceptive acts or practices were likely to and did in fact deceive reasonable consumers.

358. GM intentionally and knowingly misrepresented material facts regarding the Polluting Vehicles with intent to mislead Plaintiffs and the Louisiana Class.

359. GM knew or should have known that its conduct violated the Louisiana CPL.

360. GM owed Plaintiffs a duty to disclose the emissions in the Polluting Vehicles, because GM:

- a. Possessed exclusive knowledge;
- b. Intentionally concealed the foregoing from Plaintiffs; and/or
- c. Made incomplete representations about the emissions and performance of the Polluting Vehicles, while purposefully withholding material facts from Plaintiffs that contradicted these representations.

361. Plaintiffs and the Louisiana Class suffered ascertainable loss caused by GM's misrepresentations and its concealment of and failure to disclose material information.

362. As a direct and proximate result of GM's violations of the Louisiana CPL, Plaintiffs and the Louisiana Class have suffered injury-in-fact and/or actual damage.

363. Pursuant to LA. REV. STAT. § 51:1409, Plaintiffs and the Louisiana Class seek to recover actual damages in an amount to be determined at trial; treble damages for GM's knowing violations of the Louisiana CPL; an order enjoining GM's unfair, unlawful, and/or deceptive practices; declaratory relief; attorneys' fees; and any other just and proper relief available under LA. REV. STAT. § 51:1409.

### **COUNT 9**

#### **FRAUDULENT CONCEALMENT (BASED ON LOUISIANA LAW)**

364. Plaintiffs reallege and incorporate by reference all paragraphs as though fully set forth herein.

365. This claim is brought by Plaintiffs on behalf of Louisiana purchasers who are members of the Class.

366. GM concealed and suppressed material facts concerning the quality of its vehicles and the emissions system in the Polluting Vehicles.

367. Because of the concealment and/or suppression of the facts, Plaintiffs and the Louisiana Class sustained damage because they overpaid for their vehicles and own vehicles that diminished in value as a result of GM's concealment. Had

they been aware of the true facts, Plaintiffs and Class members would not have purchase or leased their Polluting Vehicles or would have paid less.

**COUNT 10**

**VIOLATION OF THE MICHIGAN CONSUMER PROTECTION  
ACT  
(MICH. COMP. LAWS § 445.903 *ET SEQ.*)**

368. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

369. This claim is brought by Plaintiffs on behalf of Michigan purchasers who are members of the Class.

370. The Michigan Consumer Protection Act (Michigan CPA) prohibits “[u]nfair, unconscionable, or deceptive methods, acts, or practices in the conduct of trade or commerce,” including “[f]ailing to reveal a material fact, the omission of which tends to mislead or deceive the consumer, and which fact could not reasonably be known by the consumer”; “[m]aking a representation of fact or statement of fact material to the transaction such that a person reasonably believes the represented or suggested state of affairs to be other than it actually is”; or “[f]ailing to reveal facts that are material to the transaction in light of representations of fact made in a positive manner.” MICH. COMP. LAWS § 445.903(1).

371. Plaintiffs and Michigan Class members are “person[s]” within the meaning of the MICH. COMP. LAWS § 445.902(1)(d).

372. Each Defendant is a “person” engaged in “trade or commerce” within the meaning of the MICH. COMP. LAWS § 445.902(1)(d) and (g).

373. Plaintiffs seek injunctive relief to enjoin Defendants from continuing their unfair and deceptive acts; monetary relief against each Defendant measured as the greater of (a) actual damages in an amount to be determined at trial and (b) statutory damages in the amount of \$250 for each plaintiff; reasonable attorneys’ fees; and any other just and proper relief available under MICH. COMP. LAWS § 445.911.

374. Plaintiffs also seek punitive damages because each Defendant carried out despicable conduct with willful and conscious disregard of the rights of others. Defendants’ conduct constitutes malice, oppression, and fraud warranting punitive damages.

## **COUNT 11**

### **VIOLATION OF THE NEW JERSEY CONSUMER FRAUD ACT (N.J. STAT. ANN. § 56:8-1 *ET SEQ.*)**

375. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

376. This claim is brought by Plaintiffs on behalf of New Jersey purchasers who are members of the Class.

377. The New Jersey Consumer Fraud Act (New Jersey CFA) makes unlawful “[t]he act, use or employment by any person of any unconscionable commercial practice, deception, fraud, false pretense, false promise, misrepresentation, or the knowing concealment, suppression or omission of any material fact with the intent that others rely upon such concealment, suppression or omission, in connection with the sale or advertisement of any merchandise or real estate, or with the subsequent performance of such person as aforesaid, whether or not any person has in fact been misled, deceived or damaged thereby.” N.J. STAT. ANN. § 56:8-2.

378. Defendant, Plaintiffs, and New Jersey Class members are “persons” within the meaning of N.J. STAT. ANN. § 56:8-1(d).

379. Defendants engaged in “sales” of “merchandise” within the meaning of N.J. STAT. ANN. § 56:8-1(c), (d).

380. Plaintiffs are entitled to recover legal and/or equitable relief, including an order enjoining Defendants’ unlawful conduct, treble damages, costs, and reasonable attorneys’ fees pursuant to N.J. STAT. ANN. § 56:8-19, and any other just and appropriate relief.

**COUNT 12**

**FRAUD BY CONCEALMENT  
(BASED ON NEW JERSEY LAW)**

381. Plaintiffs incorporate by reference all preceding allegations as though fully set forth herein.

382. Plaintiffs bring this claim on behalf of the New Jersey purchasers who are members of the Class.

383. GM intentionally concealed the true amount and characteristics of the emissions in the Polluting Vehicles.

384. GM further affirmatively misrepresented to Plaintiffs in advertising and other forms of communication, including standard and uniform material provided with each car and on its website, the true performance and emissions in the Polluting Vehicles.

385. GM knew the truth when these representations were made.

386. GM had a duty to disclose the truth. Plaintiffs and the other Class members relied on GM's material representations.

387. The truth about the emissions system was known only to GM; Plaintiffs and the other Class members did not know of these facts and GM actively concealed these facts from Plaintiffs and the other Class members.

388. Plaintiffs and the other Class members reasonably relied upon GM's deception. They had no way of knowing that GM's representations were false,

misleading, or incomplete. As consumers, Plaintiffs and the other Class members did not, and could not, unravel GM's deception on their own. Rather, GM intended to deceive Plaintiffs and the other Class members by concealing the true facts about the Polluting Vehicles.

389. GM's false representations and omissions and/or misrepresentations were material to consumers because they concerned qualities of the Polluting Vehicles that played a significant role in the value of the vehicles.

390. Plaintiffs and the other Class members were unaware of the omitted material facts referenced herein and they would not have acted as they did if they had known of the concealed and/or suppressed facts, in that they would not have purchased or paid as much for these vehicles. Plaintiffs' and the other Class members' actions were justified. GM was in exclusive and/or superior control of the material facts, and such facts were not generally known to the public, Plaintiffs, or other Class members.

391. Because of the concealment and/or suppression of facts, Plaintiffs and the other Class members sustained damage because they overpaid at the time of purchase.

392. The value of Plaintiffs' and the other Class members' vehicles has diminished as a result of GM's fraudulent concealment.

393. Accordingly, GM is liable to Plaintiffs and the other Class members for damages in an amount to be proven at trial.

394. GM's acts were done wantonly, maliciously, oppressively, deliberately, with intent to defraud, and in reckless disregard of Plaintiffs' and other Class members' rights and the representations that GM made to them, in order to enrich GM. GM's conduct warrants an assessment of punitive damages in an amount sufficient to deter such conduct in the future, which amount is to be determined according to proof.

### **COUNT 13**

#### **VIOLATION OF THE NEW MEXICO UNFAIR TRADE PRACTICES ACT (N.M. STAT. ANN. § 57-12-1 *ET SEQ.*)**

395. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

396. This claim is brought by Plaintiffs on behalf of New Mexico purchasers who are members of the Class.

397. The New Mexico Unfair Trade Practices Act (New Mexico UTPA) makes unlawful "a false or misleading oral or written statement, visual description or other representation of any kind knowingly made in connection with the sale, lease, rental or loan of goods or services . . . by a person in the regular course of the person's trade or commerce, that may, tends to or does deceive or mislead any

person,” including but not limited to “failing to state a material fact if doing so deceives or tends to deceive.” N.M. STAT. ANN. § 57-12-2(D).

398. Defendant, Plaintiffs, and New Mexico Class members are “person[s]” under N.M. STAT. ANN. § 57-12-2.

399. Defendants’ actions as set forth herein occurred in the conduct of trade or commerce as defined under N.M. STAT. ANN. § 57-12-2.

400. Because Defendants’ unconscionable, willful conduct caused actual harm to Plaintiffs, Plaintiffs seek recovery of actual damages or \$100, whichever is greater; discretionary treble damages; punitive damages; and reasonable attorneys’ fees and costs, as well as all other proper and just relief available under N.M. STAT. ANN. § 57-12-10.

## **COUNT 14**

### **VIOLATION OF THE NEVADA DECEPTIVE TRADE PRACTICES ACT (NEV. REV. STAT. § 598.0903 *ET SEQ.*)**

401. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

402. This claim is brought by Plaintiffs on behalf of Nevada purchasers who are members of the Class.

403. The Nevada Deceptive Trade Practices Act (Nevada DTPA) prohibits deceptive trade practices. NEV. REV. STAT. § 598.0915 provides that a person

engages in a “deceptive trade practice” if, in the course of business or occupation, the person “[k]nowingly makes a false representation as to the characteristics, ingredients, uses, benefits, alterations or quantities of goods or services for sale or lease or a false representation as to the sponsorship, approval, status, affiliation or connection of a person therewith”; “[r]epresents that goods or services for sale or lease are of a particular standard, quality or grade, or that such goods are of a particular style or model, if he or she knows or should know that they are of another standard, quality, grade, style or model”; “[a]dvertises goods or services with intent not to sell or lease them as advertised”; or “[k]nowingly makes any other false representation in a transaction.” NEV. REV. STAT. §§ 598.0915–598.0925.

404. Accordingly, Plaintiffs seek their actual damages, punitive damages, an order enjoining Defendants’ deceptive acts or practices, costs of Court, attorney’s fees, and all other appropriate and available remedies under the Nevada DTPA. NEV. REV. STAT. § 41.600.

## COUNT 15

### **VIOLATION OF THE OREGON UNLAWFUL TRADE PRACTICES ACT (OR. REV. STAT. § 646.605 *ET SEQ.*)**

405. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

406. This claim is brought by Plaintiffs on behalf of Oregon purchasers who are members of the Class.

407. The Oregon Unfair Trade Practices Act (Oregon UTPA) prohibits a person from, in the course of the person's business, doing any of the following: representing that goods have characteristics uses, benefits, or qualities that they do not have; representing that goods are of a particular standard or quality if they are of another; advertising goods or services with intent not to provide them as advertised; and engaging in any other unfair or deceptive conduct in trade or commerce. OR. REV. STAT. § 646.608(1).

408. Each Defendant is a person within the meaning of OR. REV. STAT. § 646.605(4).

409. Each Polluting Vehicle is a "good" obtained primarily for personal family or household purposes within the meaning of OR. REV. STAT. § 646.605(6).

410. Plaintiffs are entitled to recover the greater of actual damages or \$200 pursuant to OR. REV. STAT. § 646.638(1). Plaintiffs are also entitled to punitive damages because Defendants engaged in conduct amounting to a particularly aggravated, deliberate disregard of the rights of others.

**COUNT 16**

**VIOLATIONS OF THE TEXAS DECEPTIVE TRADE  
PRACTICES AND CONSUMER PROTECTION ACT  
(TEX. BUS. & COM. CODE § 17.4 *ET SEQ.*)**

411. Plaintiffs incorporate by reference all paragraphs as though fully set forth herein.

412. This claim is brought by Plaintiffs on behalf of Texas purchasers who are members of the Class.

413. Plaintiffs and the Texas Class members are individuals with assets of less than \$25 million (or are controlled by corporations or entities with less than \$25 million in assets). *See* TEX. BUS. & COM. CODE § 17.41.

414. The Texas Deceptive Trade Practices-Consumer Protection Act (“Texas DTPA”) provides a private right of action to a consumer where the consumer suffers economic damage as the result of either (i) the use of false, misleading, or deceptive act or practice specifically enumerated in TEX. BUS. & COM. CODE § 17.46(b); or (ii) “an unconscionable action or course of action by any person.” TEX. BUS. & COM. CODE § 17.50(a)(2) & (3). The Texas DTPA declares several specific actions to be unlawful, including: “(5) Representing that goods or services have. sponsorship, approval, characteristics, ingredients, uses, benefits, or qualities that they do not have”; “(7) Representing that goods or services are of a particular standard, quality, or grade, or that goods are of a particular style or

model, if they are of another”; and “(9) advertising goods or services with intent not to sell them as advertised.” An “unconscionable action or course of action” means “an act or practice which, to a consumer’s detriment, takes advantage of the lack of knowledge, ability, experience, or capacity of the consumer to a grossly unfair degree.” TEX. BUS. & COM. CODE § 17.45(5). As detailed herein, GM has engaged in an unconscionable action or course of action and thereby caused economic damages to the Texas Class.

415. In the course of business, GM willfully failed to disclose and actively concealed the conduct discussed herein and otherwise engaged in activities with a tendency or capacity to deceive. GM also engaged in unlawful trade practices by employing deception, deceptive acts or practices, fraud, misrepresentations, or concealment, suppression, or omission of any material fact with intent that others rely upon such concealment, suppression, or omission, in connection with the sale of Polluting Vehicles.

416. GM’s unfair or deceptive acts or practices were likely to and did in fact deceive reasonable consumers, including Plaintiffs and the other Texas Class members, about the true performance of the Polluting Vehicles, the devaluing of the environmental impacts of its vehicles at GM, and the true value of the Polluting Vehicles.

417. GM intentionally and knowingly misrepresented material facts regarding the Polluting Vehicles with intent to mislead Plaintiffs and the Texas Class.

418. GM knew or should have known that their conduct violated the Texas DTPA.

419. GM owed Plaintiffs and Texas Class members a duty to disclose the true environmental impact, performance, fuel mileage, and reliability of the Polluting Vehicles, because GM:

- a. Possessed exclusive knowledge that they were selling and distributing Polluting Vehicles throughout the United States that did not perform as advertised;
- b. Intentionally concealed the foregoing from Plaintiffs and the Texas Class; and/or
- c. Made incomplete representations about the environmental friendliness, fuel mileage, towing capacity, and performance of the Polluting Vehicles while purposefully withholding material facts from Plaintiffs and the Texas Class that contradicted these representations.

420. Because GM fraudulently concealed the defective emissions treatment system, the value of the Polluting Vehicles has greatly diminished. In light of the stigma attached to the Polluting Vehicles by GM's conduct, they are now worth significantly less than they otherwise would be.

421. GM's omissions and/or misrepresentations about the emissions treatment system of the Polluting Vehicles were material to Plaintiffs and the Texas Class.

422. Plaintiffs and the Texas Class suffered ascertainable loss caused by GM's misrepresentations and their concealment of and failure to disclose material information. Class members who purchased the Polluting Vehicles either would have paid less for their vehicles or would not have purchased or leased them at all but for GM's violations of the Texas DTPA.

423. GM had an ongoing duty to all GM customers to refrain from unfair and deceptive practices under the Texas DTPA. All owners of Polluting Vehicles suffered ascertainable loss in the form of the diminished value of their vehicle as a result of GM's deceptive and unfair acts and practices made in the course of GM's business.

424. GM's violations present a continuing risk to Plaintiffs as well as to the general public. GM's unlawful acts and practices complained of herein affect the public interest.

425. As a direct and proximate result of GM's violations of the Texas DTPA, Plaintiffs and the Texas Class have suffered injury-in-fact and/or actual damage.

426. On May 23, 2017, Plaintiffs sent a letter complying with TEX. BUS. & COM. CODE ANN. § 17.505 to Defendants.

427. Plaintiffs seek monetary relief against GM measured as actual damages in an amount to be determined at trial, treble damages for GM's knowing violations of the Texas DTPA, and any other just and proper relief available under the Texas DTPA.

428. Alternatively, or additionally, pursuant to TEX. BUS. & COM. CODE § 17.50(b)(3) & (4), Plaintiffs are also entitled to disgorgement or to rescission or to any other relief necessary to restore any money or property that was acquired from them based on violations of the Texas DTPA or which the Court deems proper.

**C. Claims Brought on Behalf of the Other State Classes**

**COUNT 17**

**VIOLATION OF THE ALABAMA DECEPTIVE TRADE  
PRACTICES ACT  
(ALA. CODE § 8-19-1 *ET SEQ.*)**

429. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

430. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of Alabama purchasers who are members of the Class.

431. The Alabama Deceptive Trade Practices Act (Alabama DTPA) declares several specific actions to be unlawful, including: “engaging in any other unconscionable, false, misleading, or deceptive act or practice in the conduct of trade or commerce.” ALA. CODE § 8-19-5.

432. Plaintiffs and Alabama Class members are “consumers” within the meaning of ALA. CODE. § 8-19-3(2).

433. Plaintiffs, Alabama Class members, and GM are “persons” within the meaning of ALA. CODE § 8-19-3(3).

434. Each defendant was and is engaged in “trade or commerce” within the meaning of ALA. CODE § 8-19-3(8).

435. Pursuant to ALABAMA CODE § 8-19-10, Plaintiffs will amend to seek monetary relief against Defendants measured as the greater of (a) actual damages in an amount to be determined at trial and (b) statutory damages in the amount of \$100 for each plaintiff.

436. Plaintiffs also will amend to seek an order enjoining each Defendant’s unfair, unlawful, and/or deceptive practices, attorneys’ fees, and any other just and proper relief available under ALA. CODE. § 8-19-1 *et seq.*

437. On May 23, 2017, Plaintiffs sent a letter complying with ALA. CODE § 8-19-10(e) to Defendants. Should Defendants fail to remedy their unlawful

conduct within the requisite period, Plaintiffs will amend to seek all damages and relief to which they are entitled.

### **COUNT 18**

#### **VIOLATION OF THE ALASKA UNFAIR TRADE PRACTICES AND CONSUMER PROTECTION ACT (ALASKA STAT. ANN. § 45.50.471 *ET SEQ.*)**

438. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

439. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of Alaska purchasers who are members of the Class.

440. The Alaska Unfair Trade Practices and Consumer Protection Act (Alaska CPA) declared unfair methods of competition and unfair or deceptive acts or practices in the conduct of trade or commerce unlawful, including “using or employing deception, fraud, false pretense, false promise, misrepresentation, or knowingly concealing, suppressing, or omitting a material fact with intent that others rely upon the concealment, suppression or omission in connection with the sale or advertisement of goods or services whether or not a person has in fact been misled, deceived or damaged.” ALASKA STAT. ANN. § 45.50.471.

441. Pursuant to ALASKA STAT ANN. § 45.50.531, Plaintiffs will amend their Complaint to seek monetary relief against each Defendant measured as the

greater of (a) three times the actual damages in an amount to be determined at trial or (b) \$500 for each plaintiff.

442. Plaintiffs also will amend to seek an order enjoining each Defendant's unfair, unlawful, and/or deceptive practices pursuant to ALASKA STAT. ANN. § 45.50.535(b)(1), attorneys' fees, and any other just and proper relief available under the Alaska CPA.

443. On May 23, 2017, Plaintiffs sent a letter complying with ALASKA STAT. ANN. § 45.50.535(b)(1) to Defendants.

## **COUNT 19**

### **VIOLATION OF THE COLORADO CONSUMER PROTECTION ACT (COLO. REV. STAT. § 6-1-101 *ET SEQ.*)**

444. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

445. This claim is brought by Plaintiffs on behalf of Colorado purchasers who are members of the Class.

446. The Colorado Consumer Protection Act (Colorado CPA) prohibits deceptive practices in the course of a person's business, including but not limited to "fail[ing] to disclose material information concerning goods, services, or property which information was known at the time of an advertisement or sale if

such failure to disclose such information was intended to induce the consumer to enter into a transaction.” COLO. REV. STAT. § 6-1-105.

447. Each Defendant is a “person” under COLO. REV. STAT. § 6-1-102(6).

448. Plaintiffs and Colorado Class members are “consumers” for purposes of COL. REV. STAT § 6-1-113(1)(a).

449. Each Defendant’s conduct, as set forth above, occurred in the conduct of trade or commerce.

450. Pursuant to COLO. REV. STAT. § 6-1-113, Plaintiffs seek monetary relief against each Defendant measured as the greater of (a) actual damages in an amount to be determined at trial and discretionary trebling of such damages, or (b) statutory damages in the amount of \$500 for each plaintiff or class member.

451. Plaintiffs also seek an order enjoining each Defendant’s unfair, unlawful, or deceptive practices, declaratory relief, attorneys’ fees, and any other just and proper remedy under the Colorado CPA.

## **COUNT 20**

### **VIOLATION OF THE CONNECTICUT UNFAIR TRADE PRACTICES ACT (CONN. GEN. STAT. § 42-110A *ET SEQ.*)**

452. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

453. This claim is brought by Plaintiffs on behalf of Connecticut purchasers who are members of the Class.

454. The Connecticut Unfair Trade Practices Act (Connecticut UTPA) provides: “No person shall engage in unfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce.” CONN. GEN. STAT. § 42-110b(a).

455. Plaintiffs, Connecticut Class members, and Defendants are each a “person” within the meaning of CONN. GEN. STAT. § 42-110a(3).

456. Defendants’ challenged conduct occurred in “trade” or “commerce” within the meaning of CONN. GEN. STAT. § 42-110a(4).

457. Plaintiffs and Connecticut Class members are entitled to recover their actual damages, punitive damages, and attorneys’ fees pursuant to CONN. GEN. STAT. § 42-110g.

458. Defendants acted with reckless indifference to another’s rights, or wanton or intentional violation of another’s rights, and otherwise engaged in conduct amounting to a particularly aggravated, deliberate disregard for the rights of others. Therefore, punitive damages are warranted.

**COUNT 21**

**VIOLATION OF THE DELAWARE CONSUMER FRAUD ACT  
(DEL. CODE TIT. 6, § 2513 *ET SEQ.*)**

459. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

460. This claim is brought by Plaintiffs on behalf of Delaware purchasers who are members of the Class.

461. The Delaware Consumer Fraud Act (Delaware CFA) prohibits the “act, use, or employment by any person of any deception, fraud, false pretense, false promise, misrepresentation, or the concealment, suppression, or omission of any material fact with intent that others rely upon such concealment, suppression, or omission, in connection with the sale, lease or advertisement of any merchandise, whether or nor any person has in fact been misled, deceived, or damaged thereby.” DEL. CODE TIT. 6, § 2513(a).

462. Each Defendant is a “person” within the meaning of DEL. CODE TIT. 6, § 2511(7).

463. Defendants’ actions, as set forth above, occurred in the conduct of trade or commerce.

464. Plaintiffs seek damages under the Delaware CFA for injury resulting from the direct and natural consequences of each Defendant’s unlawful conduct. *See, e.g., Stephenson v. Capano Dev., Inc.*, 462 A.2d 1069, 1077 (Del. 1980).

Plaintiffs also seek an order enjoining each Defendant's unfair, unlawful, and/or deceptive practices, declaratory relief, attorneys' fees, and any other just and proper relief available under the Delaware CFA.

465. Defendants engaged in gross, oppressive, or aggravated conduct justifying the imposition of punitive damages.

## **COUNT 22**

### **VIOLATION OF THE GEORGIA FAIR BUSINESS PRACTICES ACT (GA. CODE ANN. § 10-1-390 *ET SEQ.*)**

466. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

467. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of Georgia purchasers who are members of the Class.

468. The Georgia Fair Business Practices Act (Georgia FBPA) declares “[u]nfair or deceptive acts or practices in the conduct of consumer transactions and consumer acts or practices in trade or commerce” to be unlawful, GA. CODE. ANN. § 101-393(b), including but not limited to “representing that goods or services have sponsorship, approval, characteristics, ingredients, uses, benefits, or quantities that they do not have”; “[r]epresenting that goods or services are of a particular

standard, quality, or grade . . . if they are of another”; and “[a]dvertising goods or services with intent not to sell them as advertised.” GA. CODE. ANN. § 10-1-393(b).

469. Plaintiffs and Georgia Class members are “consumers” within the meaning of GA. CODE. ANN. § 10-1-393(b).

470. Each Defendant engaged in “trade or commerce” within the meaning of GA. CODE. ANN. § 10-1-393(b).

471. Once the statutory notice period has expired, Plaintiffs will amend to seek damages and exemplary damages (for intentional violations) per GA. CODE. ANN. § 10-1-399(a).

472. Plaintiffs will also amend to seek an order enjoining Defendants’ unfair, unlawful, and/or deceptive practices, attorneys’ fees, and any other just and proper relief available under the Georgia FBPA per GA. CODE. ANN. § 10-1-399.

473. On May 23, 2017, Plaintiffs sent a letter complying with GA. CODE ANN. § 10-1-399(b) to Defendants.

### **COUNT 23**

#### **VIOLATION OF THE GEORGIA UNIFORM DECEPTIVE TRADE PRACTICES ACT (GA. CODE. ANN § 10-1-370 *ET SEQ.*)**

474. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

475. This claim is brought by Plaintiffs on behalf of Georgia purchasers who are members of the Class.

476. Georgia's Uniform Deceptive Trade Practices Act (Georgia UDTPA) prohibits "deceptive trade practices," which include "representing that goods or services have sponsorship, approval, characteristics, ingredients, uses, benefits, or quantities that they do not have"; "[r]epresenting that goods or services are of a particular standard, quality, or grade . . . if they are of another"; and "[a]dvertising goods or services with intent not to sell them as advertised." GA. CODE ANN. § 10-1-393(b).

477. Defendant, Plaintiffs, and Georgia Class members are "persons" within the meaning of GA. CODE ANN. § 10-1-371(5).

478. The Plaintiffs seek an order enjoining each Defendant's unfair, unlawful, and/or deceptive practices, attorneys' fees, and any other just and proper relief available under GA. CODE ANN. § 10-1-373.

## **COUNT 24**

### **VIOLATION OF THE HAWAII ACT § 480-2(A) (HAW. REV. STAT. § 480 *ET SEQ.*)**

479. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

480. This claim is brought by Plaintiffs on behalf of Hawaii purchasers who are members of the Class.

481. HAWAII REV. STAT. § 480-2(a) prohibits “unfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce.”

482. Each Defendant is a “person” under HAW. REV. STAT. § 480-1.

483. Plaintiffs and Hawaii Class members are “consumer[s]” as defined by HAW. REV. STAT. § 480-1, who purchased or leased the Polluting Vehicles at issue.

484. Pursuant to HAW. REV. STAT. § 480-13, Plaintiffs seek monetary relief against each Defendant measured as the greater of (a) \$1,000 and (b) threefold actual damages in an amount to be determined at trial.

485. Under HAW. REV. STAT. § 480-13.5, Plaintiffs seek an additional award against each Defendant of up to \$10,000 for each violation directed at a Hawaii elder. Each Defendant knew or should have known that its conduct was directed to one or more Plaintiffs who are elders. Defendants’ conduct caused one or more of these elders to suffer a substantial loss of property set aside for retirement or for personal or family care and maintenance, or assets essential to the health or welfare of the elder. Plaintiffs who are elders are substantially more vulnerable to Defendants’ conduct because of age, poor health or infirmity, impaired understanding, restricted mobility, or disability, and each of them suffered a substantial physical, emotional, or economic damage resulting from each Defendant’s conduct.

**COUNT 25**

**VIOLATION OF THE IDAHO CONSUMER PROTECTION ACT  
(IDAHO CODE ANN. § 48-601 *ET SEQ.*)**

486. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

487. This claim is brought by Plaintiffs on behalf of Idaho purchasers who are members of the Class.

488. The Idaho Consumer Protection Act (Idaho CPA) prohibits deceptive business practices, including but not limited to (1) representing that the Polluting Vehicles have characteristics, uses, and benefits which they do not have; (2) representing that the Polluting Vehicles are of a particular standard, quality, and grade when they are not; (3) advertising the Polluting Vehicles with the intent not to sell them as advertised; (4) engaging in acts or practices which are otherwise misleading, false, or deceptive to the consumer; and (5) engaging in any unconscionable method, act or practice in the conduct of trade or commerce. *See* IDAHO CODE ANN. § 48-603.

489. Each Defendant is a “person” under IDAHO CODE ANN. § 48-602(1).

490. Defendants’ acts or practices as set forth above occurred in the conduct of “trade” or “commerce” under IDAHO CODE ANN. § 48-602(2).

491. Pursuant to IDAHO CODE ANN. § 48-608, Plaintiffs seek monetary relief against each Defendant measured as the greater of (a) actual damages in an

amount to be determined at trial and (b) statutory damages in the amount of \$1,000 for each plaintiff.

492. Plaintiffs also seek an order enjoining each Defendant's unfair, unlawful, and/or deceptive practices, attorneys' fees, and any other just and proper relief available under the Idaho CPA.

493. Plaintiffs also seek punitive damages against Defendants because each Defendant's conduct evidences an extreme deviation from reasonable standards. Defendants' unlawful conduct constitutes malice, oppression, and fraud warranting punitive damages.

## **COUNT 26**

### **VIOLATION OF THE INDIANA DECEPTIVE CONSUMER SALES ACT (IND. CODE § 24-5-0.5-3)**

494. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

495. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of Indiana purchasers who are members of the Class.

496. Indiana's Deceptive Consumer Sales Act (Indiana DCSA) prohibits a person from engaging in a "deceptive business practice[s]" or acts, including but not limited to "(1) That such subject of a consumer transaction has sponsorship,

approval, performance, characteristics, accessories, uses, or benefits that they do not have, or that a person has a sponsorship, approval, status, affiliation, or connection it does not have; (2) That such subject of a consumer transaction is of a particular standard, quality, grade, style or model, if it is not and if the supplier knows or should reasonably know that it is not; . . . (7) That the supplier has a sponsorship, approval or affiliation in such consumer transaction that the supplier does not have, and which the supplier knows or should reasonably know that the supplier does not have; . . . (b) Any representations on or within a product or its packaging or in advertising or promotional materials which would constitute a deceptive act shall be the deceptive act both of the supplier who places such a representation thereon or therein, or who authored such materials, and such suppliers who shall state orally or in writing that such representation is true if such other supplier shall know or have reason to know that such representation was false.”

497. Each Defendant is a “person” within the meaning of IND. CODE § 25-5-0.5-2(a)(2) and a “supplier” within the meaning of IND. CODE § 24-5-0.5-2(a)(3).

498. Plaintiffs’ vehicle purchases are “consumer transactions” within the meaning of IND. CODE § 24-5-0.5-2(a)(3).

499. Pursuant to IND. CODE § 24-5-0.5-4, once the statutory notice period has expired, Plaintiffs will seek monetary relief against each Defendant measured

as the greater of (a) actual damages in an amount to be determined at trial and (b) statutory damages in the amount of \$500 for each plaintiff, including treble damages up to \$1,000 for Defendants' willfully deceptive acts.

500. Plaintiffs will also amend to seek punitive damages based on the outrageousness and recklessness of each Defendant's conduct.

501. On May 23, 2017, Plaintiffs sent a letter complying with IND. CODE § 24-5-0.5-5(a) to Defendants.

### **COUNT 27**

#### **VIOLATION OF THE IOWA PRIVATE RIGHT OF ACTION FOR CONSUMER FRAUDS ACT (IOWA CODE § 714H.1 *ET SEQ.*)**

502. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

503. This claim is brought by Plaintiffs on behalf of Iowa purchasers who are members of the Class.

504. The Iowa Private Right of Action for Consumer Frauds Act (Iowa CFA) prohibits any "practice or act the person knows or reasonably should know is an unfair practice, deception, fraud, false pretense, or false promise, or the misrepresentation, concealment, suppression, or omission of a material fact, with the intent that others rely upon the unfair practice, deception, fraud, false pretense, false promise, misrepresentation, concealment, suppression or omission in

connection with the advertisement, sale, or lease of consumer merchandise.” IOWA CODE § 714H.3.

505. Each Defendant is a “person” under IOWA CODE § 714H.2(7).

506. Plaintiffs and Iowa Class members are “consumers” as defined by IOWA CODE § 714H.2(3) who purchased or leased one or more Polluting Vehicles.

507. Pursuant to IOWA CODE § 714H.5, Plaintiffs seek an order enjoining each Defendant’s unfair and/or deceptive acts or practices, actual damages, statutory damages up to three times the amount of actual damages awarded as a result of each Defendant’s willful and wanton disregard for the rights of others, attorneys’ fees, and other such equitable relief as the court deems necessary to protect the public from further violations of the Iowa CFA.

## **COUNT 28**

### **VIOLATION OF THE KANSAS CONSUMER PROTECTION ACT (KAN. STAT. ANN. § 50-623 *ET SEQ.*)**

508. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

509. This claim is brought by Plaintiffs on behalf of Kansas purchasers who are members of the Class.

510. The Kansas Consumer Protection Act (Kansas CPA) states “[n]o supplier shall engage in any deceptive act or practice in connection with a consumer transaction.” KAN. STAT. ANN. § 50-626(a). Deceptive acts or practices

include but are not limited to “the willful use, in any oral or written representation, of exaggeration, falsehood, innuendo or ambiguity as to a material fact” and “the willful failure to state a material fact, or the willful concealment, suppression or omission of a material fact.” KAN. STAT. ANN. § 50-626.

511. Plaintiffs and Kansas Class members are “consumers” within the meaning of KAN. STAT. ANN. § 50-624(b) who purchased or leased one or more Polluting Vehicles.

512. Each sale or lease of a Polluting Vehicle to Plaintiffs was a “consumer transaction” within the meaning of KAN. STAT. ANN. § 50-624(c).

513. Pursuant to KAN. STAT. ANN. § 50-634, Plaintiffs seek monetary relief against each Defendant measured as the greater of (a) actual damages in an amount to be determined at trial and (b) statutory damages in the amount of \$10,000 for each plaintiff.

514. Plaintiffs also seek an order enjoining each Defendant’s unfair, unlawful, and/or deceptive practices, declaratory relief, attorneys’ fees, and any other just and proper relief available under KAN. STAT. ANN. § 50-623 *et seq.*

**COUNT 29**

**VIOLATION OF THE KENTUCKY CONSUMER PROTECTION  
ACT  
(KY. REV. STAT. ANN. § 367.110 *ET SEQ.*)**

515. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

516. This claim is brought by Plaintiffs on behalf of Kentucky purchasers who are members of the Class.

517. The Kentucky Consumer Protection Act (Kentucky CPA) makes unlawful “[u]nfair, false, misleading, or deceptive acts or practices in the conduct of any trade or commerce . . . .” KY. REV. STAT. ANN. § 367.170(1).

518. Defendant, Plaintiffs, and Kentucky Class members are “persons” within the meaning of KY. REV. STAT. ANN. § 367.110(1).

519. Each Defendant engaged in “trade” or “commerce” within the meaning of KY. REV. STAT. ANN. § 367.110(2).

520. Pursuant to KY. REV. STAT. ANN. § 367.220, Plaintiffs seek to recover actual damages in an amount to be determined at trial, an order enjoining each Defendant’s unfair, unlawful, and/or deceptive practices, declaratory relief, attorneys’ fees, and any other just and proper relief available under KY. REV. STAT. ANN. § 367.220.

**COUNT 30**

**VIOLATION OF THE MAINE UNFAIR TRADE PRACTICES ACT  
(ME. REV. STAT. ANN. TIT. 5, § 205-A *ET SEQ.*)**

521. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

522. This claim is brought by Plaintiffs on behalf of Maine purchasers who are members of the Class.

523. The Maine Unfair Trade Practices Act (Maine UTPA) makes unlawful “[u]nfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce.” ME. REV. STAT. ANN. TIT. 5, § 207.

524. Defendant, Plaintiffs, and Maine Class members are “persons” within the meaning of ME. REV. STAT. ANN. TIT. § 5, 206(2).

525. Defendants are engaged in “trade” or “commerce” within the meaning of ME. REV. STAT. ANN. TIT. § 5, 206(3).

526. Pursuant to ME. REV. STAT. ANN. TIT. 5, § 213, Plaintiffs seek an order enjoining each Defendant’s unfair and/or deceptive acts or practices.

527. On May 23, 2017, Plaintiffs sent a letter complying with ME. REV. STAT. ANN. TIT. 5, § 213(1-A) to Defendants. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of Maine purchasers who are members of the Class.

**COUNT 31**

**VIOLATION OF THE MARYLAND CONSUMER PROTECTION  
ACT  
(MD. CODE ANN., COM. LAW § 13-101 *ET SEQ.*)**

528. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

529. This claim is brought by Plaintiffs on behalf of Maryland purchasers who are members of the Class.

530. The Maryland Consumer Protection Act (Maryland CPA) provides that a person may not engage in any unfair or deceptive trade practice in the sale or lease of any consumer good, including “failure to state a material fact if the failure deceives or tends to deceive” and “[d]eception, fraud, false pretense, false premise, misrepresentation, or knowing concealment, suppression, or omission of any material fact with the intent that a consumer rely on the same,” MD. CODE ANN., COM. LAW § 13-301, regardless of whether the consumer is actually deceived or damaged, MD. CODE ANN., COM. LAW § 13-302.

531. Defendants, Plaintiffs, and Maryland Class members are “persons” within the meaning of MD. CODE ANN., COM. LAW § 13-101(h).

532. Pursuant to MD. CODE ANN., COM. LAW § 13-408, Plaintiffs seek actual damages, attorneys’ fees, and any other just and proper relief available under the Maryland CPA.

**COUNT 32**

**VIOLATION OF THE MASSACHUSETTS GENERAL LAW  
CHAPTER 93(A)  
(MASS. GEN. LAWS CH. 93A, § 1 *ET SEQ.*)**

533. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

534. On May 23, 2017, Plaintiffs sent a letter complying with MASS. GEN. LAWS CH. 93A, § 9(3) to Defendants.

**COUNT 33**

**VIOLATION OF THE MINNESOTA PREVENTION OF  
CONSUMER FRAUD ACT  
(MINN. STAT. § 325F.68 *ET SEQ.*)**

535. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

536. This claim is brought by Plaintiffs on behalf of Minnesota purchasers who are members of the Class.

537. The Minnesota Prevention of Consumer Fraud Act (Minnesota CFA) prohibits “[t]he act, use, or employment by any person of any fraud, false pretense, false promise, misrepresentation, misleading statement or deceptive practice, with the intent that others rely thereon in connection with the sale of any merchandise, whether or not any person has in fact been misled, deceived, or damaged thereby.” MINN. STAT. § 325F.69(1).

538. Each purchase or lease of an Polluting Vehicle constitutes “merchandise” within the meaning of MINN. STAT. § 325F.68(2).

539. Pursuant to MINN. STAT. § 8.31(3a), Plaintiffs seek actual damages, attorneys’ fees, and any other just and proper relief available under the Minnesota CFA.

540. Plaintiffs also seek punitive damages under MINN. STAT. § 549.20(1)(a) given the clear and convincing evidence that each Defendant’s acts show deliberate disregard for the rights of others.

#### **COUNT 34**

#### **VIOLATION OF THE MINNESOTA DECEPTIVE TRADE PRACTICES ACT (MINN. STAT. § 325D.43-48 *ET SEQ.*)**

541. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

542. This claim is brought by Plaintiffs on behalf of Minnesota purchasers who are members of the Class.

543. The Minnesota Deceptive Trade Practices Act (Minnesota DTPA) prohibits deceptive trade practices, which include “[t]he act, use, or employment by any person of any fraud, false pretense, false promise, misrepresentation, misleading statement or deceptive practice, with the intent that others rely thereon

in connection with the sale of any merchandise, whether or not any person has in fact been misled, deceived, or damaged thereby.” MINN. STAT. § 325F.69(1).

544. Pursuant to MINN. STAT. § 8.31(3a), Plaintiffs seek actual damages, attorneys’ fees, and any other just and proper relief available under the Minnesota CFA.

545. Plaintiffs also seek punitive damages under MINN. STAT. § 549.20(1)(a) given the clear and convincing evidence that Defendants’ acts show deliberate disregard for the rights of others.

### **COUNT 35**

#### **VIOLATION OF THE MISSISSIPPI CONSUMER PROTECTION ACT (MISS. CODE. ANN. § 75-24-1 *ET SEQ.*)**

546. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

547. This claim is brought by Plaintiffs on behalf of Mississippi purchasers who are members of the Class.

548. The Mississippi Consumer Protection Act (Mississippi CPA) prohibits “unfair or deceptive trade practices in or affecting commerce.” MISS. CODE ANN. § 75-24-5(1). Unfair or deceptive practices include but are not limited to “(e) Representing that goods or services have sponsorship, approval, characteristics, ingredients, uses, benefits, or quantities that they do not have or

that a person has a sponsorship, approval, status, affiliation, or connection that he does not have”; “(g) Representing that goods or services are of a particular standard, quality, or grade, or that goods are of a particular style or model, if they are of another”; and “(i) Advertising goods or services with intent not to sell them as advertised.” MISS. CODE ANN. § 75-24-5(2).

549. Plaintiffs seek actual damages in an amount to be determined at trial any other just and proper relief available under the Mississippi CPA.

### **COUNT 36**

#### **VIOLATION OF THE MONTANA UNFAIR TRADE PRACTICES AND CONSUMER PROTECTION ACT OF 1973 (MONT. CODE ANN. § 30-14-101 *ET SEQ.*)**

550. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

551. This claim is brought by Plaintiffs on behalf of Montana purchasers who are members of the Class.

552. The Montana Unfair Trade Practices and Consumer Protection Act (Montana CPA) makes unlawful any “unfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce.” MONT. CODE ANN. § 30-14-103.

553. Defendant, Plaintiffs, and Montana Class members are “persons” within the meaning of MONT. CODE ANN. § 30-14-102(6).

554. Plaintiffs and Montana Class members are “consumer[s]” under MONT. CODE ANN. § 30-14-102(1).

555. The sale or lease of each Polluting Vehicle at issue occurred within “trade and commerce” within the meaning of MONT. CODE ANN. § 30-14-102(8), and each Defendant committed deceptive and unfair acts in the conduct of “trade and commerce” as defined in that statutory section.

556. Because Defendants’ unlawful methods, acts, and practices have caused Plaintiffs to suffer an ascertainable loss of money and property, Plaintiffs seek from each Defendant: the greater of actual damages or \$500; discretionary treble damages; and reasonable attorneys’ fees.

557. Plaintiffs additionally seek an order enjoining each Defendant’s unfair, unlawful, and/or deceptive practices, and any other relief the Court considers necessary or proper, under MONT. CODE ANN. § 30-14-133.

### **COUNT 37**

#### **VIOLATION OF THE NEBRASKA CONSUMER PROTECTION ACT (NEB. REV. STAT. § 59-1601 *ET SEQ.*)**

558. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

559. This claim is brought by Plaintiffs on behalf of Nebraska purchasers who are members of the Class.

560. The Nebraska Consumer Protection Act (Nebraska CPA) prohibits “unfair or deceptive acts or practices in the conduct of any trade or commerce.” NEB. REV. STAT. § 59-1602.

561. Defendant, Plaintiffs, and Nebraska Class members are “person[s]” under NEB. REV. STAT. § 59-1601(1).

562. Defendants’ actions as set forth herein occurred in the conduct of trade or commerce as defined under NEB. REV. STAT. § 59-1601(2).

563. Because Defendants’ conduct caused injury to Plaintiffs’ property through violations of the Nebraska CPA, Plaintiffs seek recovery of actual damages as well as enhanced damages up to \$1,000, an order enjoining each Defendant’s unfair or deceptive acts and practices, costs of Court, reasonable attorneys’ fees, and any other just and proper relief available under NEB. REV. STAT. § 59-1609.

### **COUNT 38**

#### **VIOLATION OF THE NEW HAMPSHIRE CONSUMER PROTECTION ACT (N.H. REV. STAT. ANN. § 358-A:1 *ET SEQ.*)**

564. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

565. This claim is brought by Plaintiffs on behalf of New Hampshire purchasers who are members of the Class.

566. The New Hampshire Consumer Protection Act (New Hampshire CPA) prohibits a person, in the conduct of any trade or commerce, from “using any unfair or deceptive act or practice,” including “but . . . not limited to, the following: . . . [r]epresenting that goods or services have . . . characteristics, . . . uses, benefits, or quantities that they do not have”; “[r]epresenting that goods or services are of a particular standard, quality, or grade, . . . if they are of another”; and “[a]dvertising goods or services with intent not to sell them as advertised.” N.H. REV. STAT. § 358-A:2.

567. Defendant, Plaintiffs, and New Hampshire Class members are “persons” under N.H. REV. STAT. ANN. § 358-A:1.

568. Defendants’ actions as set forth herein occurred in the conduct of trade or commerce as defined under N.H. REV. STAT. ANN. § 358-A:1.

569. Because Defendants’ willful conduct caused injury to Plaintiffs’ property through violations of the New Hampshire CPA, Plaintiffs seek recovery of actual damages or \$1,000, whichever is greater; treble damages; costs and reasonable attorneys’ fees; an order enjoining each Defendant’s unfair and/or deceptive acts and practices; and any other just and proper relief under N.H. REV. STAT. ANN. § 358-A:10.

**COUNT 39**

**VIOLATION OF THE NEW YORK GENERAL BUSINESS LAW  
(N.Y. GEN. BUS. LAW §§ 349–350)**

570. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

571. This claim is brought by Plaintiffs on behalf of New York purchasers who are members of the Class.

572. The New York General Business Law (New York GBL) makes unlawful “[d]eceptive acts or practices in the conduct of any business, trade or commerce.” N.Y. GEN. BUS. LAW § 349.

573. Plaintiffs and New York Class members are “persons” within the meaning of N.Y. GEN. BUS. LAW § 349(h).

574. Each Defendant is a “person,” “firm,” “corporation,” or “association” within the meaning of N.Y. GEN. BUS. LAW § 349.

575. Defendants’ deceptive acts and practices, which were intended to mislead consumers who purchased or leased an Polluting Vehicle, was conduct directed at consumers.

576. Because Defendants’ willful and knowing conduct caused injury to Plaintiffs, Plaintiffs seek recovery of actual damages or \$50, whichever is greater; discretionary treble damages up to \$1,000; punitive damages; reasonable attorneys’

fees and costs; an order enjoining Defendants' deceptive conduct; and any other just and proper relief available under N.Y. GEN. BUS. LAW § 349.

**COUNT 40**

**VIOLATION OF THE NORTH CAROLINA UNFAIR AND  
DECEPTIVE ACTS  
AND PRACTICES ACT  
(N.C. GEN. STAT. § 75-1.1 *ET SEQ.*)**

577. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

578. This claim is brought by Plaintiffs on behalf of North Carolina purchasers who are members of the Class.

579. North Carolina's Unfair and Deceptive Acts and Practices Act (the North Carolina Act) broadly prohibits "unfair or deceptive acts or practices in or affecting commerce." N.C. GEN. STAT. § 75-1.1(a).

580. Defendants engaged in "commerce" within the meaning of N.C. GEN. STAT. § 75-1.1(b).

581. Plaintiffs seek an order for treble their actual damages, an order enjoining Defendants' unlawful acts, costs of Court, attorney's fees, and any other just and proper relief available under the North Carolina Act, N.C. GEN. STAT. § 75-16.

**COUNT 41**

**VIOLATION OF THE NORTH DAKOTA CONSUMER FRAUD ACT  
(N.D. CENT. CODE § 51-15-02)**

582. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

583. This claim is brought by Plaintiffs on behalf of North Dakota purchasers who are members of the Class.

584. The North Dakota Consumer Fraud Act (North Dakota CFA) makes unlawful “[t]he act, use, or employment by any person of any deceptive act or practice, fraud, false pretense, false promise, or misrepresentation, with the intent that others rely thereon in connection with the sale or advertisement of any merchandise.” N.D. CENT. CODE § 51-15-02.

585. Defendant, Plaintiffs, and North Dakota Class members are “persons” within the meaning of N.D. CENT. CODE § 51-15-02(4).

586. Defendants’ engaged in the “sale” of “merchandise” within the meaning of N.D. CENT. CODE § 51-15-02(3), (5).

587. Defendants knowingly committed the conduct described above and therefore, under N.D. CENT. CODE § 51-15-09, Defendants are liable to Plaintiffs for treble damages in amounts to be proven at trial, as well as attorneys’ fees, costs, and disbursements. Plaintiffs further seek an order enjoining each

Defendant's unfair and/or deceptive acts or practices, and other just and proper available relief under the North Dakota CFA.

**COUNT 42**

**VIOLATION OF THE OHIO CONSUMER SALES PRACTICES ACT  
(OHIO REV. CODE ANN. § 1345.01 *ET SEQ.*)**

588. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

589. This claim is brought by Plaintiffs on behalf of Ohio purchasers who are members of the Class.

590. Ohio Consumer Sales Practices Act (Ohio CSPA), OHIO REV. CODE ANN. § 1345.02, broadly prohibits unfair or deceptive acts or practices in connection with a consumer transaction. Specifically, and without limitation of the broad prohibition, the Act prohibits (1) representing that Polluting Vehicles have characteristics, uses, benefits, and qualities which they do not have, (2) representing that Polluting Vehicles are of a particular standard, quality, and grade when they are not, (3) advertising Polluting Vehicles with the intent not to sell them as advertised, and (4) engaging in acts or practices which are otherwise unfair, misleading, false, or deceptive to the consumer. OHIO REV. CODE ANN. § 1345.02.

591. The Ohio Attorney General has made available for public inspection prior state court decisions which have held that the acts and omissions of GM in

this Complaint, including but not limited to the failure to honor both implied warranties and express warranties, the making and distribution of false, deceptive, and/or misleading representations, and the concealment and/or non-disclosure of a dangerous defect, constitute deceptive sales practices in violation of the OCSPA.

These cases include, but are not limited to, the following:

- a. *Mason v. Mercedes Benz USA, LLC* (OPIF #10002382);
- b. *State ex rel. Betty D. Montgomery v. Volkswagen Motor Co.* (OPIF #10002123);
- c. *State ex rel. Betty D. Montgomery v. Bridgestone/Firestone, Inc.* (OPIF #10002025);
- d. *Bellinger v. Hewlett-Packard Co.*, No. 20744, 2002 Ohio App. LEXIS 1573 (Ohio Ct. App. Apr. 10, 2002) (OPIF #10002077);
- e. *Borror v. MarineMax of Ohio*, No. OT-06-010, 2007 Ohio App. LEXIS 525 (Ohio Ct. App. Feb. 9, 2007) (OPIF #10002388);
- f. *State ex rel. Jim Petro v. Craftmatic Organization, Inc.* (OPIF #10002347);
- g. *Mark J. Craw Volkswagen, et al. v. Joseph Airport Toyota, Inc.* (OPIF #10001586);
- h. *State ex rel. William J. Brown v. Harold Lyons, et al.* (OPIF #10000304);
- i. *Brinkman v. Mazda Motor of America, Inc.* (OPIF #10001427);
- j. *Khoury v. Don Lewis* (OPIF #100001995);
- k. *Mosley v. Performance Mitsubishi aka Automanage* (OPIF #10001326);
- l. *Walls v. Harry Williams dba Butch's Auto Sales* (OPIF #10001524); and

m. *Brown v. Spears* (OPIF #10000403).

592. Each Defendant is a “supplier” as that term is defined in OHIO REV. CODE ANN. § 1345.01(C).

593. Plaintiffs and Ohio Class members are “consumers” as that term is defined in OHIO REV. CODE ANN. § 1345.01(D), and their purchase or lease of one or more Polluting Vehicles is a “consumer transaction” within the meaning of OHIO REV. CODE ANN. § 1345.01(A).

594. As a result of the foregoing wrongful conduct, Plaintiffs have been damaged in an amount to be proven at trial and seek all just and proper remedies, including but not limited to actual and statutory damages, an order enjoining Defendants’ deceptive and unfair conduct, treble damages, court costs, and reasonable attorneys’ fees, pursuant to OHIO REV. CODE ANN. § 1345.09 *et seq.*

### **COUNT 43**

#### **VIOLATION OF THE OKLAHOMA CONSUMER PROTECTION ACT (OKLA. STAT. TIT. 15, § 751 *ET SEQ.*)**

595. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

596. This claim is brought by Plaintiffs on behalf of Oklahoma purchasers who are members of the Class.

597. The Oklahoma Consumer Protection Act (Oklahoma CPA) declares unlawful, *inter alia*, the following acts or practices when committed in the course of business: making a “misrepresentation, omission or other practice that has deceived or could reasonably be expected to deceive or mislead a person to the detriment of that person” and “any practice which offends established public policy or if the practice is immoral, unethical, oppressive, unscrupulous or substantially injurious to consumers.” OKLA. STAT. TIT. 15, §§ 752–753.

598. Plaintiffs and Oklahoma Class members are “persons” under OKLA. STAT. TIT. 15, § 752.

599. Each Defendant is a “person,” “corporation,” or “association” within the meaning of OKLA. STAT. TIT. 15, § 15-751(1).

600. The sale or lease of an Polluting Vehicle to Plaintiffs was a “consumer transaction” within the meaning of OKLA. STAT. TIT. 15, § 752 and each Defendants’ actions as set forth herein occurred in the conduct of trade or commerce.

601. Defendants’ acts were made knowingly, intentionally, and with malice. Defendants demonstrated a complete lack of care and were in reckless disregard for the rights of Plaintiffs and the other Class members. Plaintiffs and the other Class members are therefore entitled to an award of punitive damages to the extent permitted under applicable law.

602. Defendants' conduct as alleged herein was unconscionable because (1) Defendants, knowingly or had reason to know, took advantage of consumers reasonably unable to protect their interests because of their ignorance of GM's fraudulent omissions and representations; (2) at the time the consumer transaction was entered into, Defendants knew or had reason to know that price the consumers were charged grossly exceeded the price at which they would have paid if they had known of the Defendants' scheme, and (3) Defendant knew or had reason to know that the transaction Defendants induced the consumers to enter into was excessively one-sided in favor of each Defendant.

603. Because Defendants' unconscionable conduct caused injury to Plaintiffs, Plaintiffs seek recovery of actual damages, discretionary penalties up to \$2,000 per violation, and reasonable attorneys' fees, under OKLA. STAT. TIT. 15, § 761.1. Plaintiffs further seek an order enjoining each Defendant's unfair and/or deceptive acts or practices, and any other just and proper relief available under the Oklahoma CPA.

#### **COUNT 44**

#### **VIOLATION OF THE PENNSYLVANIA UNFAIR TRADE PRACTICES AND CONSUMER PROTECTION LAW (73 PA. CONS. STAT. § 201-1 *ET SEQ.*)**

604. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

605. This claim is brought by Plaintiffs on behalf of Pennsylvania purchasers who are members of the Class.

606. The Pennsylvania Unfair Trade Practices and Consumer Protection Law (Pennsylvania CPL) prohibits unfair or deceptive acts or practices, including representing that goods or services have characteristics, benefits or qualities that they do not have; representing that goods or services are of a particular standard, quality or grade if they are of another; advertising goods or services with intent not to sell them as advertised; and engaging in any other fraudulent or deceptive conduct which creates a likelihood of confusion or misunderstanding. 73 P.S. § 201-2(4).

607. Defendant, Plaintiffs, and Pennsylvania Class members are “persons” within the meaning of 73 PA. CONS. STAT. § 201-2(2).

608. Plaintiffs purchased or leased Polluting Vehicles primarily for personal, family, or household purposes within the meaning of 73 PA. CONS. STAT. § 201-9.2.

609. All of the acts complained of herein were perpetrated by Defendants in the course of trade or commerce within the meaning of 73 PA. CONS. STAT. § 201-2(3).

610. Defendants are liable to Plaintiffs for treble their actual damages or \$100, whichever is greater, and attorneys’ fees and costs. 73 PA. CONS. STAT.

§ 201-9.2(a). Plaintiffs are also entitled to an award of punitive damages given that Defendants' conduct was malicious, wanton, willful, oppressive, or exhibited a reckless indifference to the rights of others.

**COUNT 45**

**VIOLATION OF THE RHODE ISLAND UNFAIR TRADE  
PRACTICES  
AND CONSUMER PROTECTION ACT  
(R.I. GEN. LAWS § 6-13.1 *ET SEQ.*)**

611. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

612. This claim is brought by Plaintiffs on behalf of Rhode Island purchasers who are members of the Class.

613. Rhode Island's Unfair Trade Practices and Consumer Protection Act (Rhode Island CPA) prohibits "unfair or deceptive acts or practices in the conduct of any trade or commerce," including "[e]ngaging in any act or practice that is unfair or deceptive to the consumer" and "[u]sing any other methods, acts or practices which mislead or deceive members of the public in a material respect." R.I. GEN. LAWS § 6-13.1-1(6).

614. Defendant, Plaintiffs, and Rhode Island Class members are "persons" within the meaning of R.I. GEN. LAWS § 6-13.1-1(3).

615. Defendants were engaged in "trade" and "commerce" within the meaning of R.I. GEN. LAWS § 6-13.1-1(5).

616. Plaintiffs purchased or leased Polluting Vehicles primarily for personal, family, or household purposes within the meaning of R.I. GEN. LAWS § 6-13.1-5.2(a).

617. Plaintiffs are entitled to recover the greater of actual damages or \$200 pursuant to R.I. GEN. LAWS § 6-13.1-5.2(a). Plaintiffs also seek punitive damages at the discretion of the Court.

#### **COUNT 46**

#### **VIOLATION OF THE SOUTH CAROLINA UNFAIR TRADE PRACTICES ACT (S.C. CODE ANN. § 39-5-10 *ET SEQ.*)**

618. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

619. This claim is brought by Plaintiffs on behalf of South Carolina purchasers who are members of the Class.

620. The South Carolina Unfair Trade Practices Act (South Carolina UTPA) prohibits “unfair or deceptive acts or practices in the conduct of any trade or commerce.” S.C. CODE ANN. § 39-5-20(a).

621. Each Defendant is a “person” under S.C. CODE ANN. § 39-5-10.

622. Pursuant to S.C. CODE ANN. § 39-5-140(a), Plaintiffs seek monetary relief to recover their economic losses. Because Defendants’ actions were willful and knowing, Plaintiffs’ damages should be trebled.

623. Plaintiffs further allege that Defendants' malicious and deliberate conduct warrants an assessment of punitive damages because Defendants carried out despicable conduct with willful and conscious disregard of the rights of others. Defendants' unlawful conduct constitutes malice, oppression, and fraud warranting punitive damages.

624. Plaintiffs further seek an order enjoining each Defendant's unfair or deceptive acts or practices.

#### **COUNT 47**

#### **VIOLATION OF THE SOUTH DAKOTA DECEPTIVE TRADE PRACTICES AND CONSUMER PROTECTION LAW (S.D. CODIFIED LAWS § 37-24-6)**

625. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

626. This claim is brought by Plaintiffs on behalf of South Dakota purchasers who are members of the Class.

627. The South Dakota Deceptive Trade Practices and Consumer Protection Law (South Dakota CPL) prohibits deceptive acts or practices, which include "[k]nowingly act[ing], us[ing], or employ[ing] any deceptive act or practice, fraud, false pretense, false promises, or misrepresentation or to conceal, suppress, or omit any material fact in connection with the sale or advertisement of

any merchandise, regardless of whether any person has in fact been misled, deceived, or damaged thereby.” S.D. CODIFIED LAWS §§ 37-24-6(1), 37-24-31.

628. Under S.D. CODIFIED LAWS § 37-24-31, Plaintiffs are entitled to a recovery of their actual damages suffered as a result of Defendants’ acts and practices.

### **COUNT 48**

#### **VIOLATION OF THE UTAH CONSUMER SALE PRACTICES ACT (UTAH CODE ANN. § 13-11-1 *ET SEQ.*)**

629. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

630. This claim is brought by Plaintiffs on behalf of Utah purchasers who are members of the Class.

631. The Utah Consumer Sales Practices Act (Utah CSPA) makes unlawful any “deceptive act or practice by a supplier in connection with a consumer transaction,” including but not limited to indicating that the subject of a consumer transaction has sponsorship, approval, performance characteristics, accessories, uses, or benefits, if it has not; indicating that the subject of a consumer transaction is of a particular standard, quality, grade, style, or model, if it is not; and “indicat[ing] that a specific price advantage exists, if it does not.” UTAH CODE ANN. § 13-11-4.

632. Defendants knew, or had reason to know, that consumers would rely on their failure to disclose the defects in its emissions system. Defendants therefore engaged in an unconscionable act within the meaning of UTAH CODE ANN. § 13-11-5.

633. Pursuant to UTAH CODE ANN. § 13-11-4, Plaintiffs seek monetary relief measured as the greater of (a) actual damages in an amount to be determined at trial and (b) statutory damages in the amount of \$2,000 for each Plaintiff; reasonable attorneys' fees; and any other just and proper relief available under the Utah CSPA.

#### **COUNT 49**

#### **VIOLATION OF THE VERMONT CONSUMER FRAUD ACT (VT. STAT. ANN. TIT. 9, § 2451 *ET SEQ.*)**

634. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

635. This claim is brought by Plaintiffs on behalf of Vermont purchasers who are members of the Class.

636. The Vermont Consumer Fraud Act (Vermont CFA) makes unlawful “[u]nfair methods of competition in commerce, and unfair or deceptive acts or practices in commerce.” VT. STAT. ANN. TIT. 9, § 2453(a).

637. Defendants were sellers within the meaning of VT. STAT. ANN. TIT. 9, § 2451(a)(c).

638. Plaintiffs are entitled to recover “appropriate equitable relief” and “the amount of [their] damages, or the consideration or the value of the consideration given by [them], reasonable attorney’s fees, and exemplary damages not exceeding three times the value of the consideration given by [them],” pursuant to VT. STAT. ANN. TIT. 9, § 2461(b).

### **COUNT 50**

#### **VIOLATION OF THE VIRGINIA CONSUMER PROTECTION ACT (VA. CODE ANN. § 59.1-196 *ET SEQ.*)**

639. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

640. This claim is brought by Plaintiffs on behalf of Virginia purchasers who are members of the Class.

641. The Virginia Consumer Protection Act (Virginia CPA) lists prohibited “practices,” which include “[u]sing any other deception, fraud, false pretense, false promise, or misrepresentation in connection with a consumer transaction.” VA. CODE ANN. § 59.1-200.

642. Each Defendant is a “supplier” under VA. CODE ANN. § 59.1-198.

643. Each sale and lease of an Polluting Vehicle was a “consumer transaction” within the meaning of VA. CODE ANN. § 59.1-198.

644. Pursuant to VA. CODE ANN. § 59.1-204, Plaintiffs seek monetary relief against each Defendant measured as the greater of (a) actual damages in an amount

to be determined at trial and (b) statutory damages in the amount of \$500 for each Plaintiff. Because Defendants' conduct was committed willfully and knowingly, Plaintiffs are entitled to recover, for each plaintiff, the greater of (a) three times actual damages or (b) \$1,000.

645. Plaintiffs also seek an order enjoining each Defendant's unfair and/or deceptive acts or practices, punitive damages, and attorneys' fees, and any other just and proper relief available under VA. CODE ANN. § 59.1-204 *et seq.*

### **COUNT 51**

#### **VIOLATION OF THE WASHINGTON CONSUMER PROTECTION ACT (WASH. REV. CODE ANN. § 19.86.010 *ET SEQ.*)**

646. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

647. This claim is brought by Plaintiffs on behalf of Washington purchasers who are members of the Class.

648. The Washington Consumer Protection Act (Washington CPA) broadly prohibits "[u]nfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce." WASH. REV. CODE. ANN. § 19.96.010.

649. Defendants committed the acts complained of herein in the course of “trade” or “commerce” within the meaning of WASH. REV. CODE. ANN.

§ 19.96.010.

650. Defendants are liable to Plaintiffs for damages in amounts to be proven at trial, including attorneys’ fees, costs, and treble damages, as well as any other remedies the Court may deem appropriate under WASH. REV. CODE. ANN.

§ 19.86.090.

## **COUNT 52**

### **VIOLATION OF THE WEST VIRGINIA CONSUMER CREDIT AND PROTECTION ACT (W. VA. CODE § 46A-1-101 *ET SEQ.*)**

651. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

652. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of West Virginia purchasers who are members of the Class.

653. Each Defendant is a “person” under W. VA. CODE § 46A-1-102(31).

654. Plaintiffs and West Virginia Class members are “consumers” as defined by W. VA. CODE §§ 46A-1-102(12) and 46A-6-102(2), who purchased or leased one or more Polluting Vehicles.

655. Defendants engaged in trade or commerce as defined by W. VA. CODE § 46A-6-102(6).

656. The West Virginia Consumer Credit and Protection Act (West Virginia CCPA) prohibits “unfair or deceptive acts or practices in the conduct of any trade or commerce.” W. VA. CODE § 46A-6-104. Without limitation, “unfair or deceptive” acts or practices include:

(I) Advertising goods or services with intent not to sell them as advertised; . . .

(L) Engaging in any other conduct which similarly creates a likelihood of confusion or of misunderstanding;

(M) The act, use or employment by any person of any deception, fraud, false pretense, false promise or misrepresentation, or the concealment, suppression or omission of any material fact with intent that others rely upon such concealment, suppression or omission, in connection with the sale or advertisement of any goods or services, whether or not any person has in fact been misled, deceived or damaged thereby; [and]

(N) Advertising, printing, displaying, publishing, distributing or broadcasting, or causing to be advertised, printed, displayed, published, distributed or broadcast in any manner, any statement or representation with regard to the sale of goods or the extension of consumer credit including the rates, terms or conditions for the sale of such goods or the extension of such credit, which is false, misleading or deceptive or which omits to state material information which is necessary to make the statements therein not false, misleading or deceptive.

W. VA. CODE § 46A-6-102(7).

657. Pursuant to W. VA. CODE § 46A-6-106, once the statutory notice period has expired, Plaintiffs will amend to seek monetary relief against the

Defendants measured as the greater of (a) actual damages in an amount to be determined at trial and (b) statutory damages in the amount of \$200 per violation of the West Virginia CCPA for each Plaintiff.

658. Plaintiffs will also amend to seek punitive damages against the Defendants because they carried out despicable conduct with willful and conscious disregard of the rights of others, subjecting Plaintiffs to cruel and unjust hardship as a result.

659. Plaintiffs further seek an order enjoining the Defendants' unfair or deceptive acts or practices, restitution, punitive damages, costs of Court, attorney's fees under W. VA. CODE § 46A-5-101 *et seq.*, and any other just and proper relief available under the West Virginia CCPA.

660. On May 23, 2017, Plaintiffs sent a letter complying with W. VA. CODE § 46A-6-106(b) to Defendants. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of West Virginia purchasers who are members of the Class.

**COUNT 53**

**VIOLATION OF THE WISCONSIN DECEPTIVE TRADE  
PRACTICES ACT  
(WIS. STAT. § 110.18)**

661. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

662. This claim is brought by Plaintiffs on behalf of Wisconsin purchasers who are members of the Class.

663. The Wisconsin Deceptive Trade Practices Act (Wisconsin DTPA) prohibits a “representation or statement of fact which is untrue, deceptive or misleading.” WIS. STAT. § 100.18(1).

664. Each Defendant is a “person, firm, corporation or association” within the meaning of WIS. STAT. § 100.18(1).

665. Plaintiffs and Wisconsin Class members are members of “the public” within the meaning of WIS. STAT. § 100.18(1). Plaintiffs purchased or leased one or more Polluting Vehicles.

666. Plaintiffs are entitled to damages and other relief provided for under WIS. STAT. § 100.18(11)(b)(2). Because Defendants’ conduct was committed knowingly and/or intentionally, Plaintiffs are entitled to treble damages.

667. Plaintiffs also seek court costs and attorneys’ fees under WIS. STAT. § 110.18(11)(b)(2).

**COUNT 54**

**VIOLATION OF THE WYOMING CONSUMER PROTECTION ACT  
(WYO. STAT. § 40-12-105 *ET SEQ.*)**

668. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this complaint.

669. This claim is included here for notice purposes only. Once the statutory notice period has expired, Plaintiffs will amend their complaint to bring this claim on behalf of Wyoming purchasers who are members of the Class.

670. Pursuant to WYO. STAT. § 40-12-108(a), once the statutory notice period has expired, Plaintiffs will amend to seek monetary relief against the Defendants measured as actual damages in an amount to be determined at trial, in addition to any other just and proper relief available under the Wyoming CPA.

671. On May 23, 2017, Plaintiffs sent a letter complying with WYO. STAT. § 45-12-109 to Defendants. If Defendants fail to remedy their unlawful conduct, Plaintiffs will seek all damages and relief to which Plaintiffs are entitled.

**REQUEST FOR RELIEF**

WHEREFORE, Plaintiffs, individually and on behalf of members of the Nationwide RICO Class and State Classes, respectfully request that the Court enter judgment in their favor and against Defendants, as follows:

A. Certification of the proposed Nationwide RICO Class and State Classes, including appointment of Plaintiffs' counsel as Class Counsel;

B. Restitution, including at the election of Class members, recovery of the purchase price of their Polluting Vehicles, or the overpayment or diminution in value of their Polluting Vehicles;

C. Damages, including punitive damages, costs, and disgorgement in an amount to be determined at trial, except that monetary relief under certain consumer protection statutes, as stated above, shall be limited prior to completion of the applicable notice requirements;

D. An order requiring Defendants to pay both pre- and post-judgment interest on any amounts awarded;

E. An award of costs and attorneys' fees; and

F. Such other or further relief as may be appropriate.

### **DEMAND FOR JURY TRIAL**

Plaintiffs hereby demand a jury trial for all claims so triable.

DATED: August 4, 2017

Respectfully Submitted,

By /s/ Steve W. Berman

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